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ABSTRACT

An instructor's manual and student activity guide on food services are provided in this set of prevocational education materials which focuses on the vocational area of home economics. (This set of materials is one of ninety-two prevocational education sets arranged around a cluster of seven vocational offerings: agriculture, home economics, distributive education, health occupations, world of work, trade and industry, and office occupations.) The instructor's guide is organized into the following elements: title of activity, duration of activity (four to seven periods), activity goals, seventeen instructional objectives for three areas (measuring solids, liquids, and weighing), related vocational clusters, and activity implementation (description, materials needed, safety considerations, teacher preparation prior to class, during the class, follow-up activities, answer key to student check point activities, and masters for duplication [e.g., checkpoint sheets, seven recipes]). The student activity guide provides step-by-step instructions (narrative and illustrations) for completing each instructional objective. At the end of each set of instructions is a student check point (evaluation activity). Five occupational descriptions (meat grinder, butcher, cook, chef, and baker) conclude the document. (JH)

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ED169307

HOME ECONOMICS – FOOD SERVICES

Kit No. 18

INSTRUCTOR'S MANUAL

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TITLE OF ACTIVITY

Kit No. 18, Home Economics – Food Services

DURATION

Main Activity – 3 to 4 periods
Follow-up Activity – 1 to 3 periods

GOALS

The student will become familiar with the various tools and equipment used in weighing and measuring.

The student will learn the techniques used in weighing and measuring.

The student will become familiar with equivalent measures.

The student will understand the relationship between metric and common measures.

INSTRUCTIONAL OBJECTIVES

Measuring Solids: The student will identify the measurement tools used for solids.

Using a measuring spoon, the student will measure ½ teaspoon of sand.

The student will recognize the measurement relationship between a teaspoon and a tablespoon.

Using a Mary Ann cup, the student will measure 1/3 cup of sand by dipping.

Using a Mary Ann cup, the student will measure ½ cup of sand by spooning.

Using a Mary Ann cup, the student will measure 1 cup of sand by pouring.

The student will recognize the method for measuring when using dry measures.

The student will compare the measurement relationships between a cup, a pint, a quart, and a gallon.

Measuring Liquids: The student will identify the measurement tools used for liquids.

Using the measuring spoon set, the student will measure 1 teaspoon of water.

The student will read the two different scales, common measure and metric measure, on a 4 cup glass measure.

Using a glass measure, the students will measure 1½ cups of water.

The student will compare the measurement relationships between common and metric measurements of liquids.

Weighing:The student will identify the various scales used for weighing.

Using a mock-up of a dial face from a 25 pound kitchen scale, the student will identify the markings on the scale in terms of pounds and ounces.

The student will adjust a kitchen scale to zero before weighing.

The student will weigh a set of predetermined weights on a kitchen scale.

VOCATIONAL CLUSTERS

Agriculture
Distributive Education
Health Occupations
Trade and Industry

ACTIVITY IMPLEMENTATION

A. Description

This activity has been designed to show the student that weighing and measuring is an intricate part of the food service industry.

The student is given the opportunity to use some of the tools and equipment used in weighing and measuring. They will also gain an understanding of the relationship between common and metric measurement and the relationship of equivalent measures.

The experience they gain from this activity will be put into practice by having the class, as a group, make some no-bake snacks for an informal party.

B. Safety

Glass measuring cups will break. If they do, use dust pan and broom to pick up large pieces of glass; use damp paper towel to remove slivers and glass dust. Never pick up broken glass by hand.

When working around heated surfaces or with pots and pan that have been heated, care must be taken to prevent getting burned.

Cleanliness is very important when handling food.

C. Materials

1. Audio Visual Equipment
   None

2. Technical Equipment
   18 measuring spoon sets (¼tsp., ½ tsp., 1 tsp., 1 tbsp.)
   9 Mary Ann cup sets (¼ cup, 1/3 cup, ½ cup, 1 cup)
   9 dry measures (1 pt.)
   9 (nine) 10" flat spatulas
   9 glass measures (Pyrex) (4 cup – 1 liter)
   9 kitchen scales, 25 pound
   1 two-burner hot plate
   9 containers for sand (1 pt.)
   9 pie pans
   9 (nine) 1 qt. containers for water
   1 double boiler (large)
   1 (one) 3 qt. covered saucepan
   2 stainless steel cooking spoons
   9 teaspoons
   1 tea kettle
   1 utility knife
   9 (nine) 25 pound kitchen scale dials
   3 sets of weights

3. Expendable Materials
   Sand (to fill nine 1 pint containers if all are used)
   Water (to fill nine 1 quart containers if all are used)
   Spirit masters
   Duplicating paper
   Paper cups (hot or cold)
   Paper plates
   Napkins
   Wax paper
   ingredients for recipes
   Pencils

D. Preparation Prior to Class

Choose the recipes you prefer your class to make from the ones located in the section labeled "Masters for Duplication."

Obtain expendable materials. Make sure you purchase the correct amount of ingredients for the recipes you have chosen for your class size.

Check for equipment and quantities as listed in "Technical Equipment."

Divide your classroom into three sections and place signs: "Measuring Solids," "Measuring Liquids," and "Weighing."

Place the "Student Activity Guides" at each of the stations.

Place the equipment called for in the "Student Activity Guides" at each station.

Fill the appropriate containers with sand and water.

Duplicate the appropriate number of copies from the "Masters for Duplication."

Fill in one of the check sheets with the correct answers to be used by students as an answer key and place on your desk.

After students have completed all of the exercises, divide them into groups to make the various snacks. You will probably want to have a special area designated for this. Make sure all utensils used in the exercises are thoroughly washed before using. Hand out copies of recipes to the various groups.

E. During Class Session

1. INTRODUCTION (read aloud to class) – Ever go to McDonald's for a Big Mac, or Burger King for a Whopper, or Hardee's for a Deluxe? If you answered yes, and you probably did, how did the employees know how much meat to put on your Big Mac or Whopper or Deluxe? They have a recipe. This recipe is not complex but it does call for a 4 oz. meat patty for each of the above. How would you feel if the employee didn't follow the recipe and only put on 2 ounces of meat, or forgot the special sauce or used too much? Would the hamburger be what you ordered? No. This is just one very small example of the thousands of times recipes are used each day in food service. And for every food there is a recipe. For the experienced, it may be in their head; but for the inexperienced, accurate measures and correct weights are a must if the product is to be a success. If the recipe for sweetened tea calls for one cup of sugar, 3/4 cup will not be sweet enough and 1¼ cups will be too sweet. Accuracy is a must.

Food Service at present uses two types of measurements for recipes, and these are both used within many of the same recipes. These measurements are weight and volume measure – you do the same thing when you purchase meat, you buy by the pound, a weight; but when you purchase milk, you buy

a half-pint, pint, quart, half-gallon, or gallon – all are volume measures.

These activites will introduce you to the methods of weighing and measuring not only in the familiar pounds, pints, quarts, etc., but also in liters and grams. This is the measurement system of tomorrow, and on your jobs you will be using metric measure. Recipes will be stated in metrics. Metric is the measurement language of tomorrow and it is 9 p.m. today!

2. Divide your class into three groups and have each group start at a different station.

3. When they have completed all the exercises at one station, tell them to go to another one until they have been through all three.

4. If some finish early, have them report to you and assign them to work on the VIEW Fact Sheet.

5. When making the snacks for the party, have the class start together. You may have to wait for a day until everyone is finished with the activities.

6. Hand out the recipes to the appropriate groups, depending on how many recipes you have picked, and let them begin.

F. Follow-up Activities

1. Have students fill out VIEW Fact Sheet.
2. Have students visit the school lunchroom to see the recipe file and measurement equipment. If possible, arrange for one of the employees to be actually scaling or measuring ingredients for a recipe. (Be sure you have observed before you take class to observe – some food service workers use approximate techniques and this would not be beneficial for class instruction.)
3. Field trips to any food service facility would be beneficial – remember food processors if you have one located locally.
4. Have students check the want ads of their local paper for openings as food service workers.

ANSWER KEY

Measuring Solids:

Checkpoint: Objective I

1. C
2. A
3. D
4. B

Checkpoint: Objective VIII

1. 1 cup
   3/4 cup
   ½ cup
   ¼ cup
2. 1 pt. = 2 cups
   3/4 pt. = 1½ cups
   ½ pt. = 1 cup
   ¼ pt. = ½ cup
   1 pt. = 2 cups
3. 1 qt. = 2 pt. = 4 cup
   3/4 qt. = 1½ pt. = 3 cup
   ½ qt. = 1 pt. = 2 cup
   ¼ qt. = ½ pt. = 1 cup
   1 qt. = 2 pts.
   1 qt. = 4 cups
4. 1 gal. = 4 qts. = 8 pt. = 16 cups
   3/4 gal. = 3 qt. = 6 pt. = 12 cups
   ½ gal. = 2 qt. = 4 pt. = 8 cups
   ¼ gal. = 1 qt. = 2 pt. = 4 cups
   1 gal. = 4 qt.
   1 gal. = 8 pt.
   1 gal. = 16 cups

Measuring Liquids:

Checkpoint: Objective I

1. B
2. C
3. A

Checkpoint: Objective V

1. 250
2. 950
3. 4

Weighing:

Checkpoint: Objective I

1. E
2. C
3. G
4. F
5. A
6. B
7. D

Checkpoint: Objective II

1. C
2. A
3. A
4. D
5. C

MASTERS FOR DUPLICATION

1. VIEW Fact sheet
2. Checkpoint: Objective I, Measuring Solids
3. Checkpoint: Objective VIII, Measuring Solids
4. Checkpoint:: Objective I, Measuring Liquids
5. Checkpoint: Objective V, Measuring Liquids
6. Checkpoint: Objective I, Weighing
7. Checkpoint: Objective II, Weighing
8. Recipes for:
   - Fruit Punch
   - Hot Apple Punch
   - Instant Cocoa Mix
   - Ding Bats
   - Krispy Cookies
   - Chocolate Oatmeal Cookies
   - Caramel Cookies

VIEW FACT SHEET

NAME _____ CLASS _____ OCCUPATION _____

A. List the advantages (good points) of this occupation (job).

B. List the disadvantages (bad points) of this occupation (job).

C. List three things you should know to do this occupation (job).
1.
2.
3.

D. What type of education should you get to be prepared (do) for this occupation (job)?

E. What courses must you take to go into this occupation (job)?

F. What do you think your future in this occupation (job) will be?

G. What wage can you expect in this occupation (job)?

H. What are the working hours of this occupation (job)?

I. To learn more about this occupation (job), write to:

J. Using a scale of 1 to 5, circle the number that measures your interest in this occupation (job) as a possible career.

I don't like it. 1 2 3 4 5 I like it.

8

CHECKPOINT: OBJECTIVE I

MEASURING SOLIDS

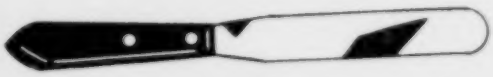
1. _____ Mary Ann Measuring Cups

2. _____ Spatula

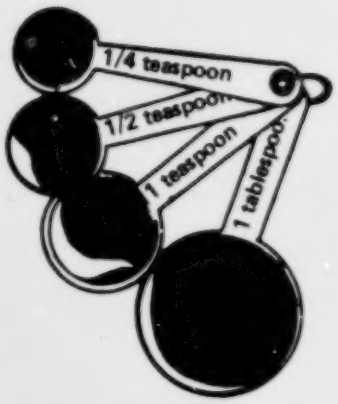
3. _____ Dry Measuring Cup

4. _____ Measuring Spoon Set

A.



B.



C.

Set Includes:
1/4 Cup
1/3 Cup
1/2 Cup
1 Cup

D.

9

CHECKPOINT: OBJECTIVE VIII
MEASURING SOLIDS

1. 1 Cup Measure

_____ C. →
3/4 C. →
_____ C. →
_____ C. →

2. 1 Pint Measure

_____ Pt. = ___ C. →
_____ Pt. = 1½ C. →
_____ Pt. = ___ C. →
1/4 Pt. = ___ C. →

1 Pint = ___ Cups

3. 1 Quart Measure

_____ Qt. = _____ Pt. = 4 C. →
_____ Qt. = _____ Pt. = _____ C. →
1/2 Qt. = _____ Pt. = _____ C. →
_____ Qt. = 1/2 Pt. = _____ C. →

1 Quart = ___ Pints
1 Quart = ___ Cups

4. 1 Gallon Measure

1 Gal. = ____ Qt. = _____ Pt. = _____ C. →
_____ Gal. = ____ Qt. = 6 Pt. = _____ C. →
_____ Gal. = 2 Qt. = ____ Pt. = _____ C. →
_____ Gal. = ____ Qt. = ____ Pt. = 4 C. →

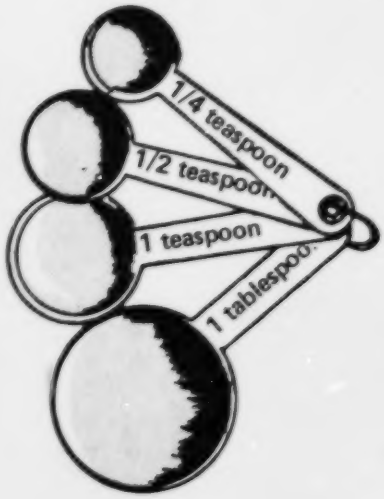
1 Gallon = ___ Quarts
1 Gallon = ___ Pints
1 Gallon = ___ Cups

CHECKPOINT: OBJECTIVE I

MEASURING LIQUIDS

1. Measuring Spoon Set _____ A.

2. 2 Cup Metal Liquid Measure _____ B.



3. 4 Cup – 1 Liter C. _____
Glass Measure C.

11

CHECKPOINT: OBJECTIVE V

MEASURING LIQUIDS

1. One (1) Cup is about _____ Milliliters .

2. 0.95 Liters = _____ Milliliters.

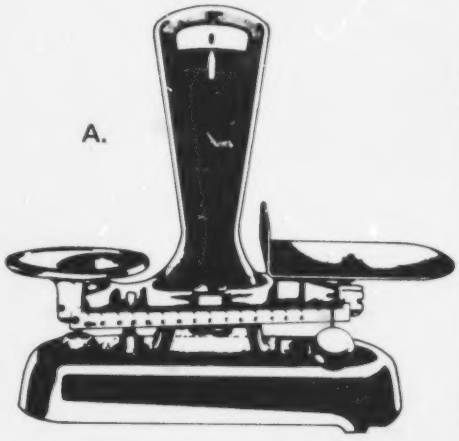
3. 0.95 Liters is about _____Cups.

CHECKPOINT: OBJECTIVE I

WEIGHING

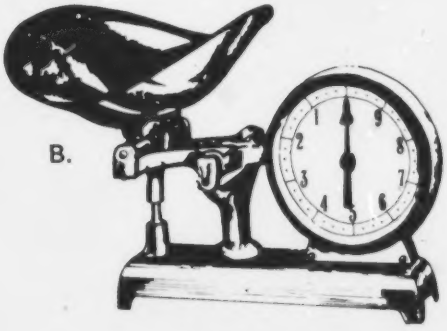
1._____Baker's Scale

A.



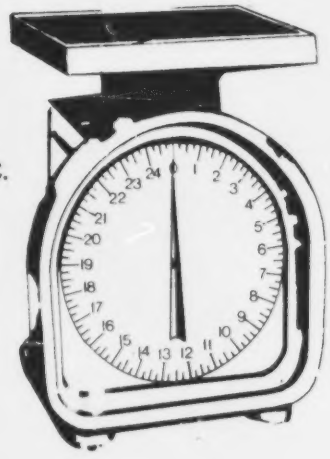
2._____General or Kitchen Scale – 25 lb. capacity

B.



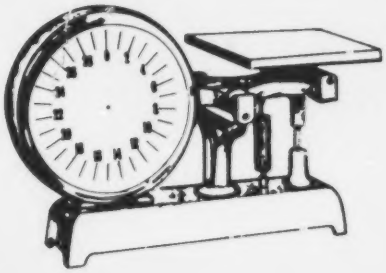
3._____Platform Scale – 1000 lb. capacity

C.



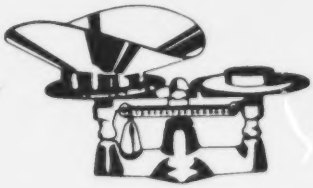
4._____ Portion Scale – 32 oz. Capacity

D.



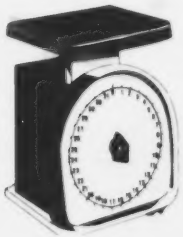
5._____ Even-Balance Scale

E.



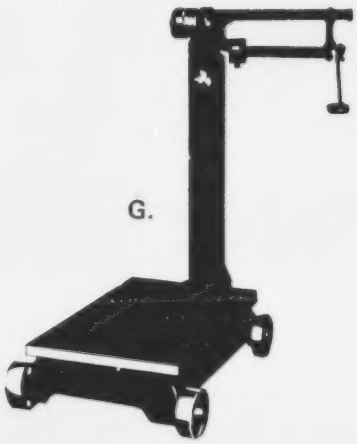
6._____ Platform Scale for
Loose Ingredients

F.



7._____ Platform Scale for
General Work – 30 lb. capacity

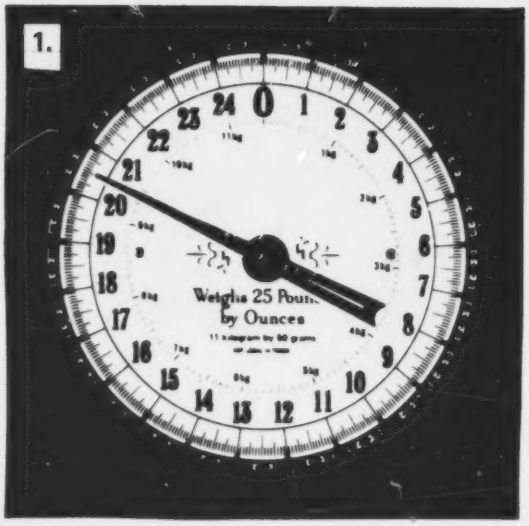
G.



CHECKPOINT: OBJECTIVE II

WEIGHING

1.



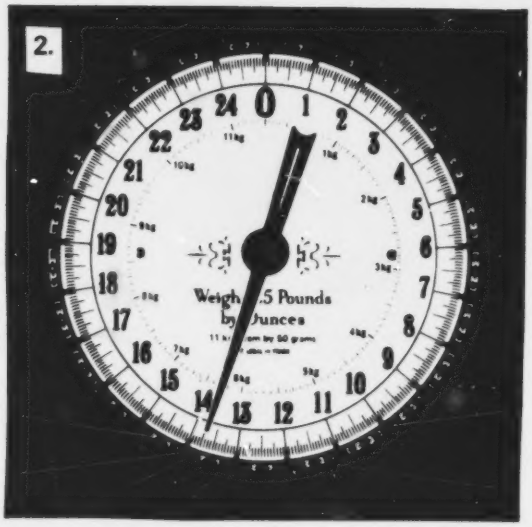
A. 20¼ lbs.

B. 20 3/4 lbs.

C. 20½ lbs.

D. 21½ lbs.

2.



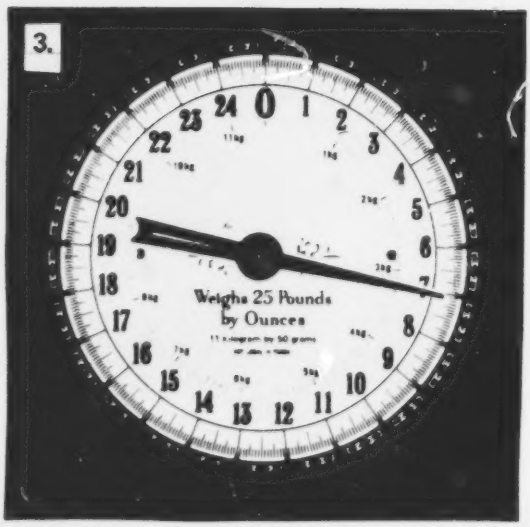
A. 13 lbs., 12 oz.

B. 13 lbs., 14 oz.

C. 13 lbs., 10 oz.

D. 13½ lbs.

3.



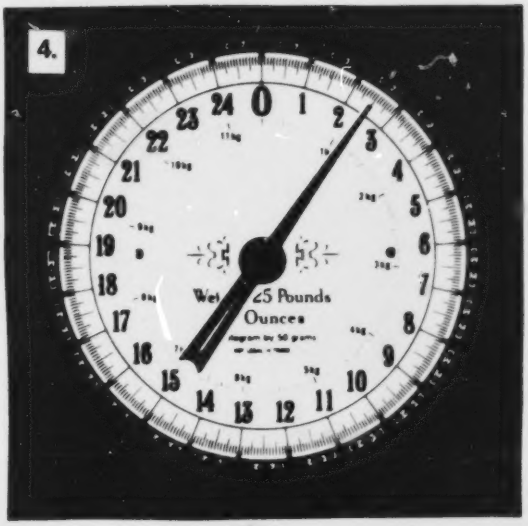
A. 7 lbs., 1 oz.

B. 6 lbs.

C. 6 lbs., 15 oz.

D. 5 lbs.

4.



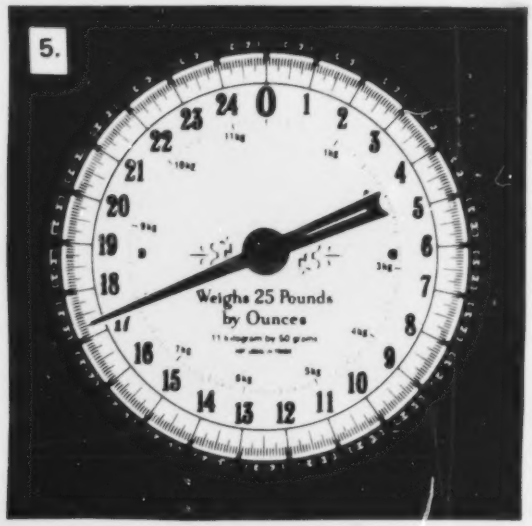
A. 1 lb., 8 oz.

B. 2 lbs., 6 oz.

C. 2 lbs., 10 oz.

D. 2 lbs., 8 oz.

5.



A. 17½ lbs.

B. 18 3/4 lbs.

C. 17¼ lbs.

D. 17 lbs., 6 oz.

FRUIT PUNCH

1 quart tea (946.3 ml)
1 pint orange juice (2 cups) (473 ml)
1 pint grapefruit juice (2 cups) (473 ml)
1 pint pineapple juice (2 cups) (473 ml)
1 quart ginger ale (946.3 ml)
½ cup lemon juice (118 ml)
4 cups sugar (944 ml)
1½ cups water (354 ml)

Make syrup by boiling 4 cups sugar with 1½ cups water. Add to fruit juice. Add ginger ale just before serving.

Serves 25 people.

HOT APPLE PUNCH

½ cup lemon juice (118 ml)
2 quarts apple juice (1.89 l)
3 sticks cinnamon
1 pint orange juice (473 ml)
3/4 cup sugar (177 ml)

Mix in large pot. Bring to boiling point; reduce heat and simmer for 10 minutes. Serve hot.

Makes 20 servings.

INSTANT COCOA MIX

1 pound powdered milk (.454 kg)
1 pound instant chocolate milk drink (.454 kg)
8 ounce jar non-dairy coffee creamer (226.8 g)
¼ pound confectioners (powdered) sugar (.113 kg)

Pour all ingredients into a large grocery bag and shake, mixing thoroughly. Store in large, tightly-closed containers in a dry place. Use 1/3 to ½ cup mix to 1 cup very hot water for instant cocoa.

DING BATS

1 cup sugar (236 ml)
1 egg, beaten
1 cup finely cut dates (236 ml)
or
1 cup raisins (236 ml)
1 stick oleo

Cook the above in a double boiler until thick (12-15 minutes). Allow to cool (about 15 minutes). Add:

2 cups Rice Krispies (472 ml)
½ cup chopped nuts (118 ml)
1 teaspoon vanilla (5 ml)

Mix well. Dip by half spoonfuls and use another spoon to drop each cookie on to wax paper.

*NOTE: May seem a little moist at first, cereal soon dries up the moisture.

Yield : 3 dozen cookies

KRISPY COOKIES

1 stick margarine
2 cups sugar (472 ml)
½ cup milk (118 ml)
1 teaspoon vanilla flavoring (5 ml)
3 cups Rice Krispies (708 ml)
or
cereal of your choice

Mix margarine, sugar and flavoring together in large boiler. Bring to full boil. Take from heat and add vanilla flavoring and 3 cups Rice Krispies. Pour into greased pan and cut into squares. Can be dropped by spoonfuls on waxed paper.

Yield: 3 dozen cookies

CHOCOLATE OATMEAL COOKIES

2 cups sugar (472 ml)
½ cup milk (118 ml)
1 stick butter
4 tbs. cocoa (60 ml)
½ cup peanut butter (118 ml)
3 cups quick oatmeal (708 ml)
½ tsp. vanilla (2.5 ml)
½ cup nuts (118 ml)

Boil sugar, milk, butter, and cocoa for 1 minute. Remove from heat. Add peanut butter, oatmeal, vanilla, and nuts. Beat well. Drop on waxed paper by tablespoonfuls.

Yield: 36 – 48 cookies.

CARAMEL COOKIES

2 cups sugar (472 ml)
3/4 cup butter (177 ml)
2/3 cup (6 oz. can) evaporated milk (157 ml)
1 pkg. (3 5/8 or 4 oz.) INSTANT butterscotch pudding mix (113.40 g)
3 1/2 cups quick-cooking oats (826 ml)

In large saucepan, combine 2 cups sugar, 3/4 cup butter, and one 6 oz. can (2/3 cup) evaporated milk. Bring mixture to rolling boil, stirring frequently. Remove from heat and add one 3 5/8 or 4 ounce package INSTANT butterscotch pudding mix and 3½ cups quick-cooking oats; mix thoroughly; drop from teaspoon on waxed paper lined tray.

Yield: About 60 cookies

HOME ECONOMICS – FOOD SERVICES

Kit No. 18

STUDENT
LEARNING ACTIVITY GUIDE

MEASURING LIQUIDS
MEASURING SOLIDS
WEIGHING

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1978

MEASURING LIQUIDS

PROGRAMMED TEXT

INTRODUCTION

The Food Service industry has to weigh and measure foods accurately. Special techniques are common throughout the industry to make sure that a recipe prepared by someone in South Carolina can be produced anywhere in the world. You will be learning how to weigh and measure ingredients accurately so that you can follow a simple recipe.

GOALS

1. The student will become familiar with the various tools and equipment used in weighing and measuring.
2. The student will learn the techniques used in weighing and measuring.
3. The student will become familiar with equivalent measures.
4. The student will understand the relationship between metric and common measures.

DIRECTIONS

Do not write in this booklet.

Get all handouts from your instructor.

Make sure you have all the material you need to complete the activity; check against the materials list.

Start with Instructional Objective I. Complete all the steps in the order given and then do the Checkpoint. After the Checkpoint is completed, go on to the next objective.

When doing the activities, try to be very neat with the sand and water.

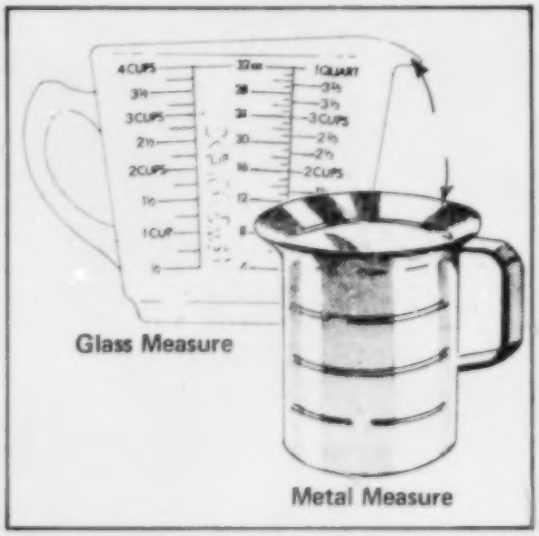
MATERIAL

Measuring spoon set (¼ tsp., ½ tsp., 1 tsp., 1 tbsp.)
1 qt. container of water
Glass measure (pyrex) (4 cup – 1 liter)

Instructional Objective 1

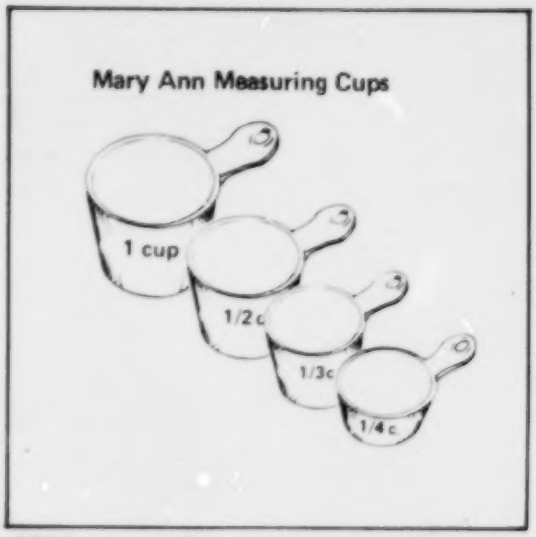
The student will identify the measurement tools used for liquids.

STEP 1 – When measuring either liquids or solids, the same measuring spoon set is used.



STEP 2 – When you want to measure larger amounts of liquids, you should use a measuring cup having a rim.

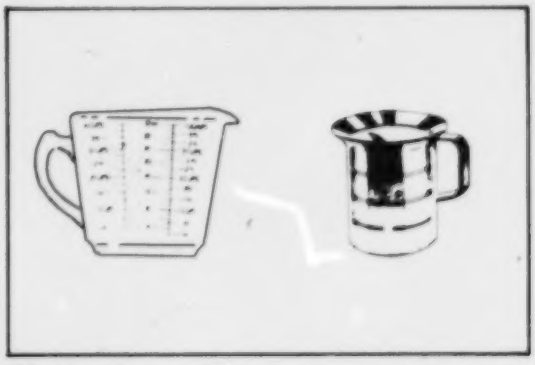
STEP 3 – The rim helps you use the measure without spillage.



STEP 4 – Should you use Mary Ann measuring cups for liquids?

STEP 5 – Mary Ann measuring cups have no rim; they should be used only with solid or powdery foods.

STEP 6 – Whenever you measure liquids, always use a measuring cup with a rim.



STEP 7 – These are two common measurement tools for use with liquids. One is glass; the other, metal. Both have rims and are available in a variety of sizes.

Check Point

Get the handout for the Checkpoint for Instructional Objective I, Measuring Liquids, from your instructor.

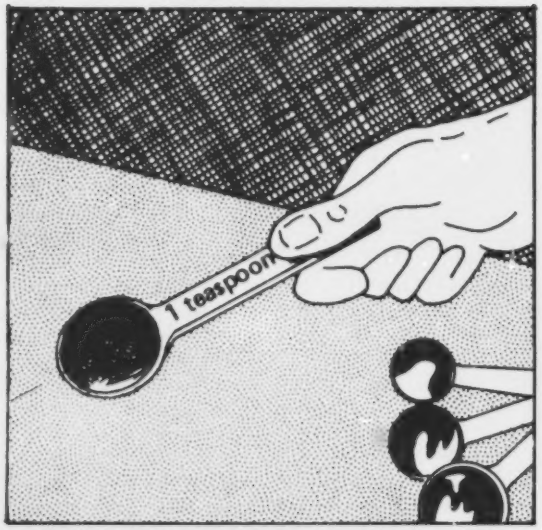
Without looking in the programmed text, identify the measurement tools by placing the letter that is by the picture in the blank space next to its name.

After you have filled in all the blanks, go back to your instructor and ask to see the master to check your answers.

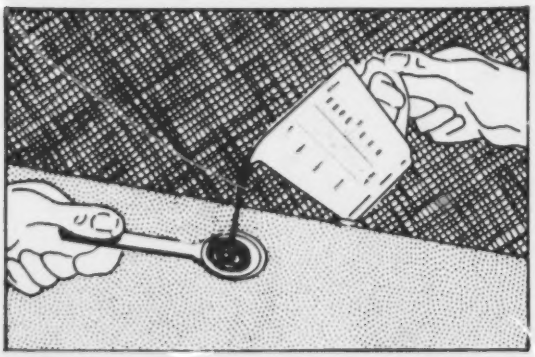
If your answers are correct, go on to the next Instructional Objective. If your answers are wrong, redo the steps and the Checkpoint.

Instructional Objective II

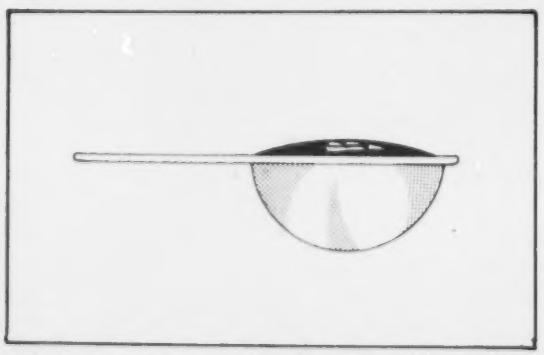
Using the measuring spoon set, the student will measure 1 teaspoon of water.



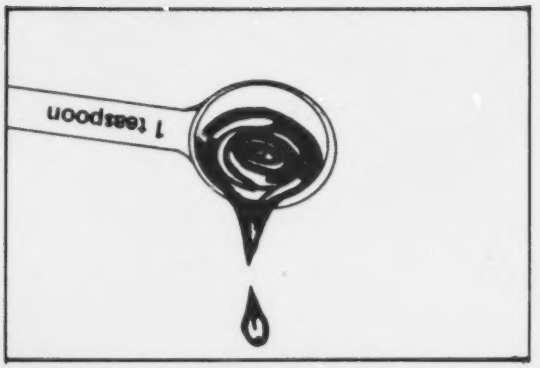
STEP 1 – Select the measuring spoon that is 1 teaspoon.



STEP 2 – Slowly pour the water from the container into the measuring spoon until full.



STEP 3 – Notice that liquids will actually stand above the edge of the spoon when it is filled.



STEP 4 – Be careful. Don't spill or your measurement won't be accurate.

STEP 5 – Pour the water back into the container.

Check Point

Did you select the correct measuring spoon?

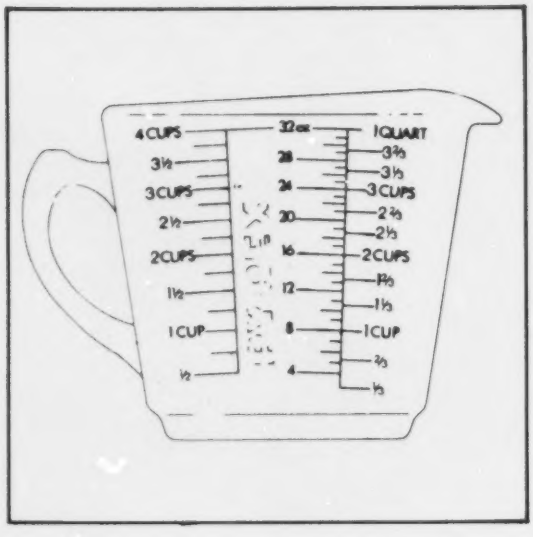
Did you notice how the water stood up above the edge of the spoon when it was filled?

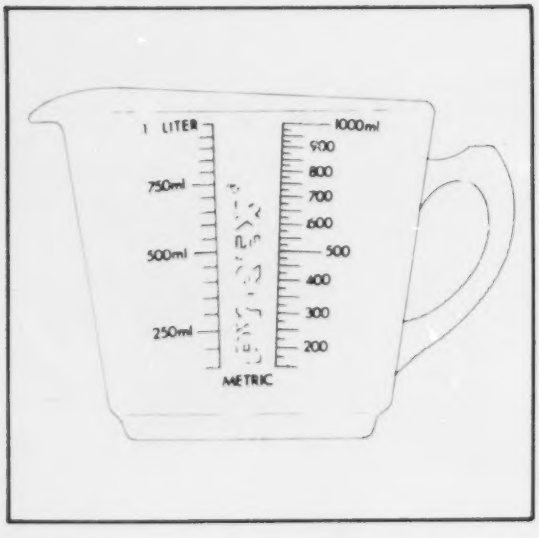
Were you careful not to spill any of the water?

27

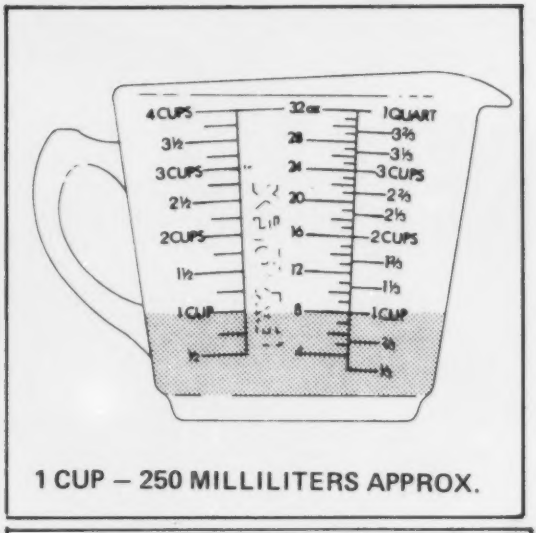
Instructional Objective III

The student will read the two different scales, common measure and metric measure, on a 4 cup glass measure.

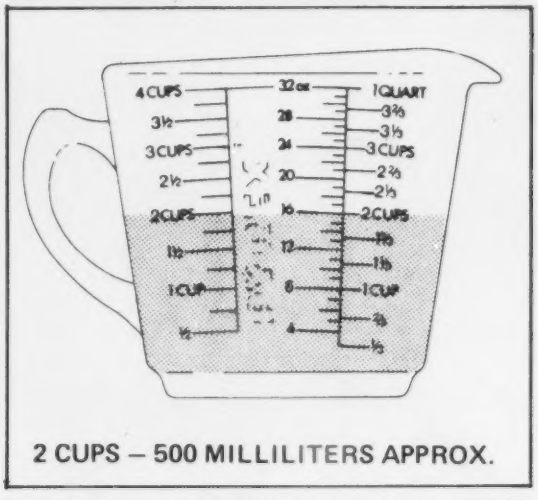




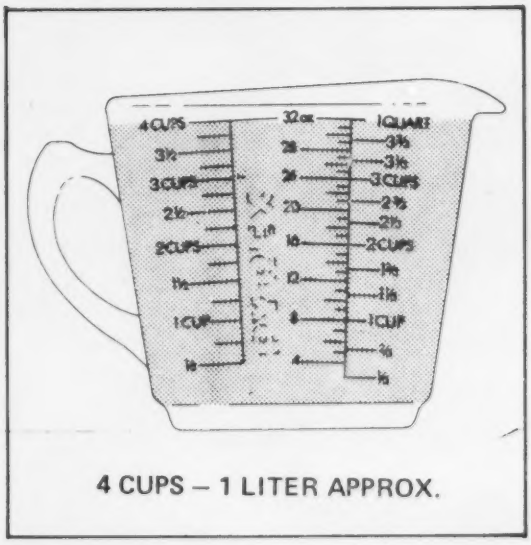
STEP 1 – Glass measures have two different scales. Common measure (cups) on one side, metric measure (milliliters, liters) on the other side.



1 CUP – 250 MILLILITERS APPROX.

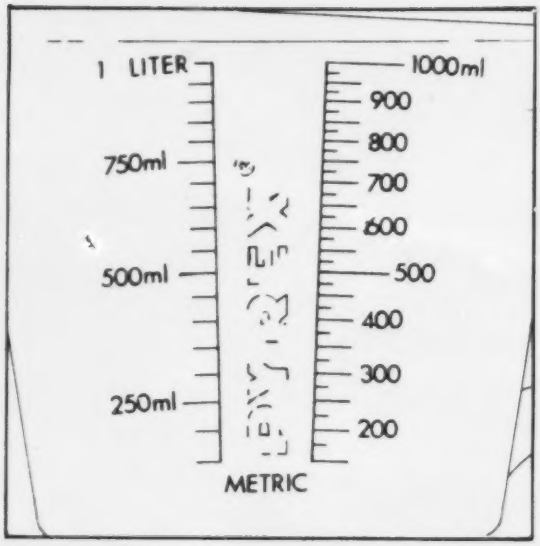


2 CUPS – 500 MILLILITERS APPROX.

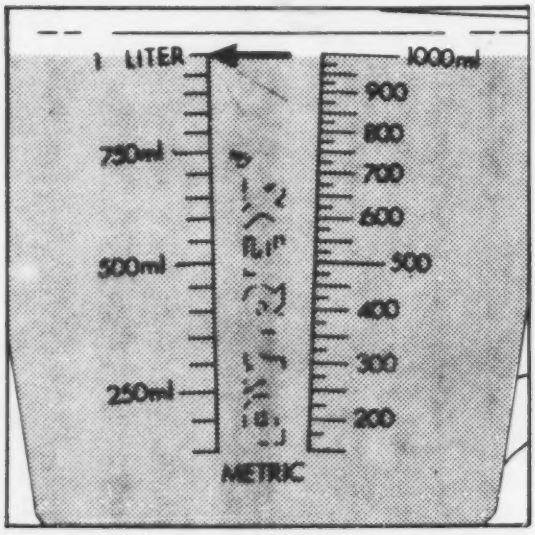


4 CUPS – 1 LITER APPROX.

STEP 2 – Look at your 4 cup glass measure. Notice that milliliters and liters measure the same thing as cups, pints, quarts, & gallons.



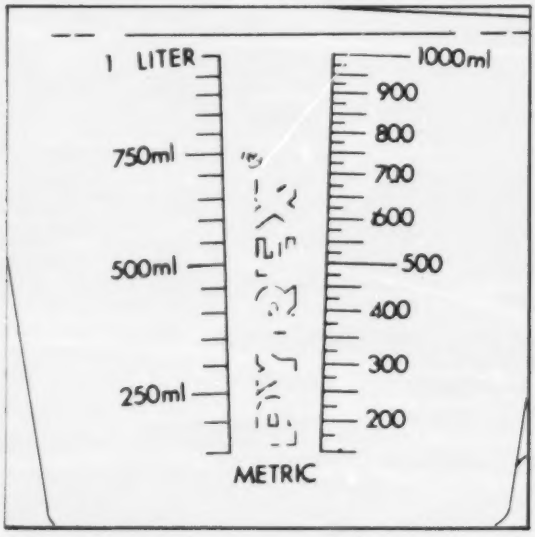
STEP 3 – Let's look first at the metric side. Notice that on the left you read litres or liters and on the right side you read ml., millilitres or milliliters.



STEP 4 – How many milliliters equal one liter?

1000 ml. = 1.0 liter

STEP 5 – 1000 milliliters equal one liter. Therefore, 1 milliliter is equal to 1/1000 liter.



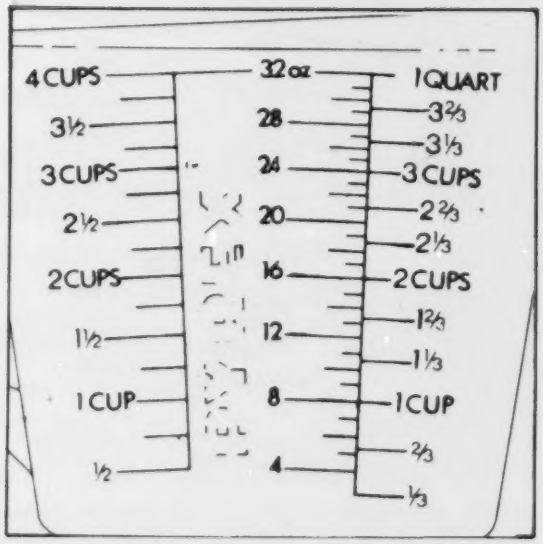
STEP 6 – How many milliliters equal .5 liters? How many liters equal 800 ml.?

500 milliliters = .5 l.

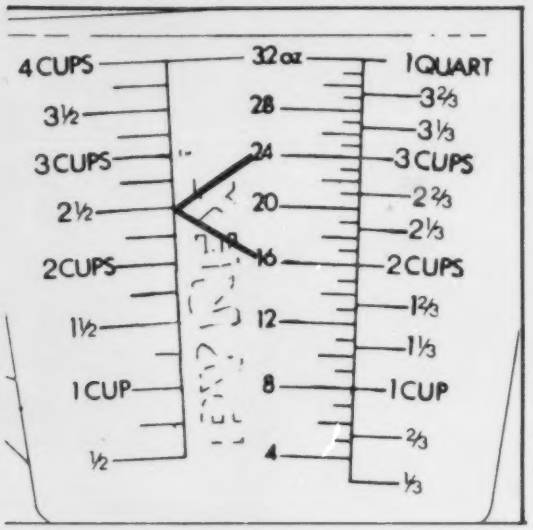
800 milliliters = .8 l.

STEP 7 – Reading a metric scale isn't hard or foreign or strange, is it? Just remember 1 milliliter = 1/1000 liter so 1000 milliliters = 1 liter.

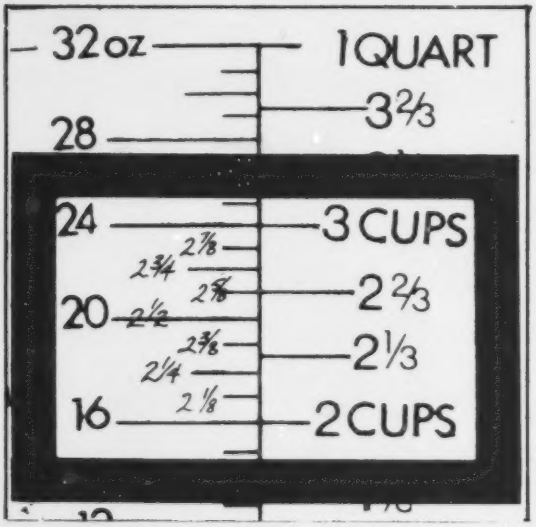
STEP 8 – Now let's look at the other side of the glass measure – the one marked in common measure.



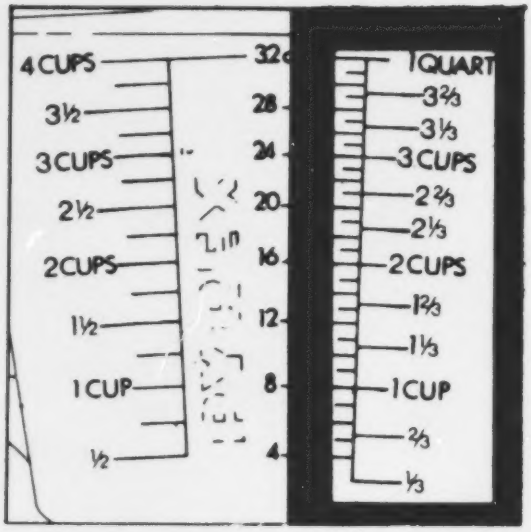
STEP 9 – Note that there are two scales on this side also. On the left, each cup has been divided into eighths; on the right each cup has been divided into thirds.



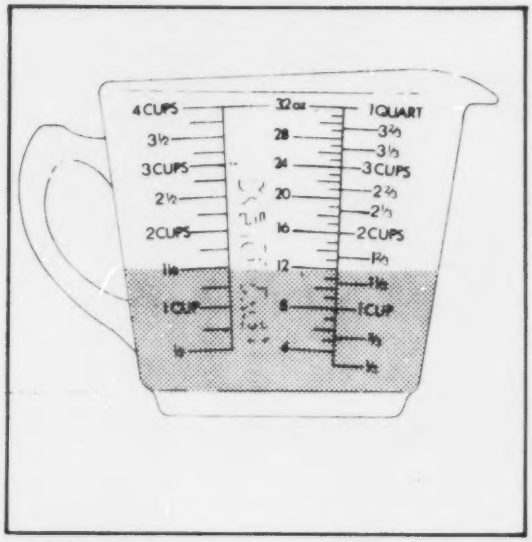
STEP 10 – Name each line between 2 cups and 3 cups.



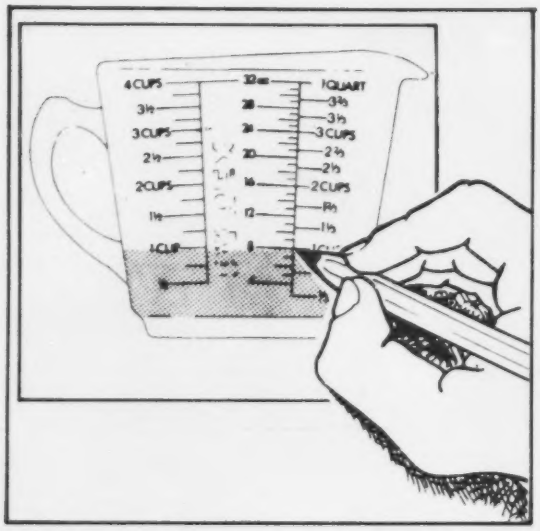
STEP 11 – On the left hand side you measure eighths, quarters, half and full cups.



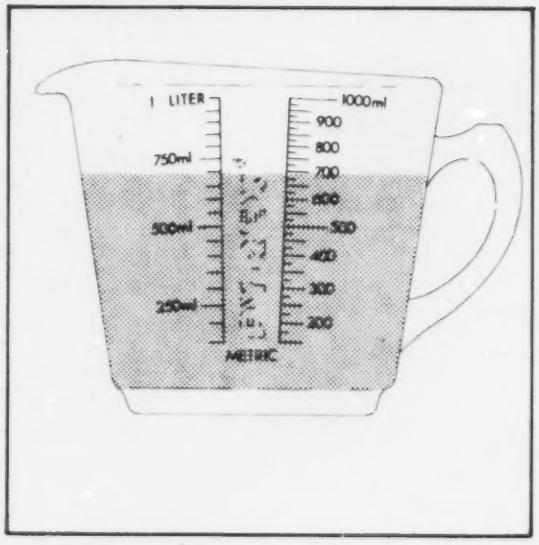
STEP 12 – Notice that on the right hand side you measure thirds of cups.



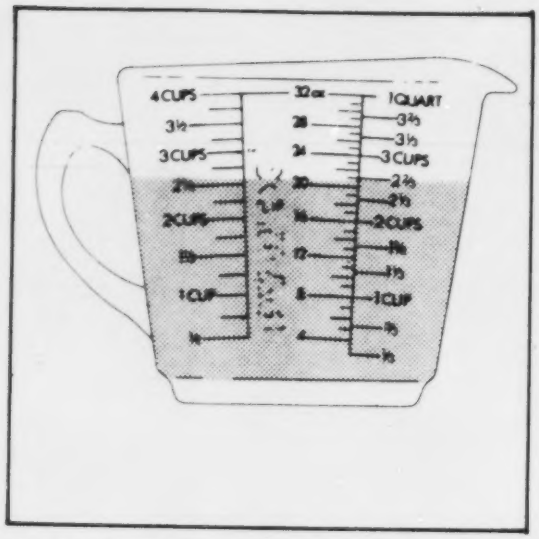
STEP 14 – How many cups are shown in the picture?



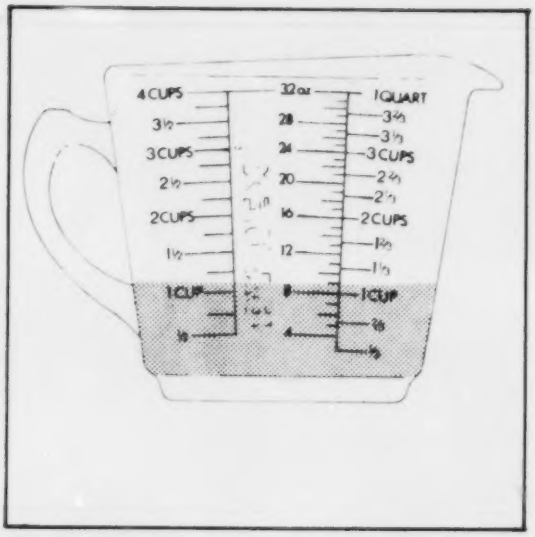
STEP 13 – Determine the amount of liquid in the following steps. This is a self-check. The answers are in Step 23.



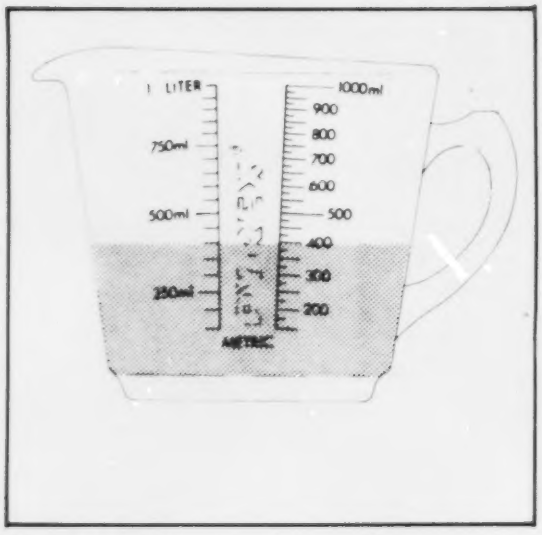
STEP 15 – How many milliliters are shown in the picture?



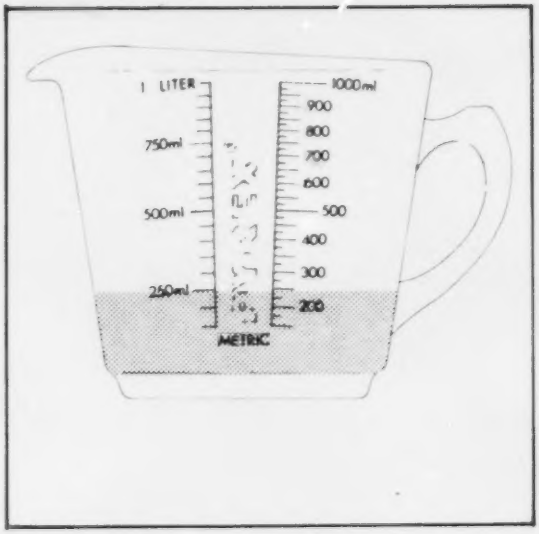
STEP 16 – How many cups are shown in the picture?



STEP 18 – How many cups are shown in the picture?

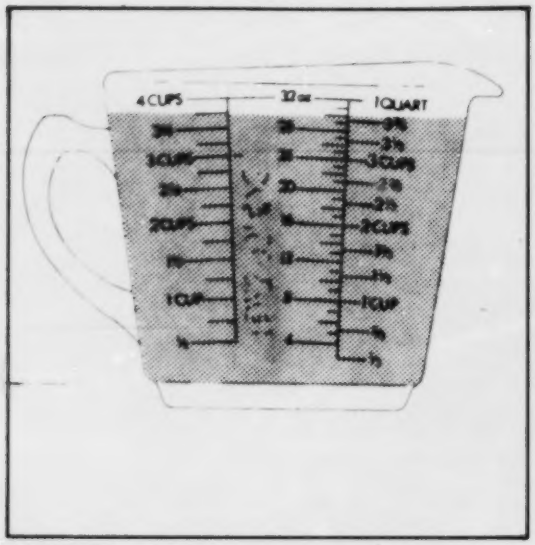


STEP 17 – How many liters are shown in the picture?

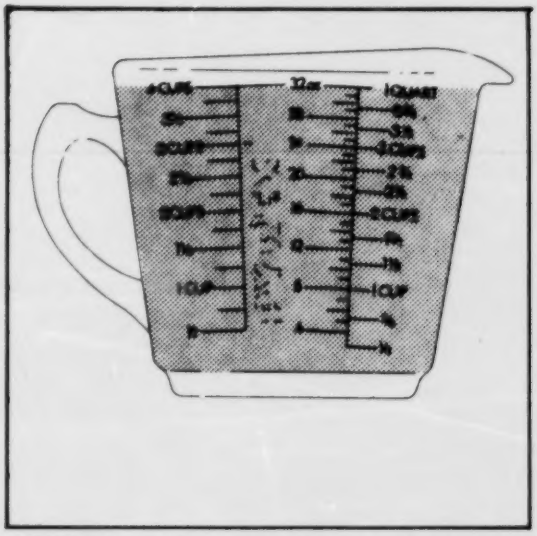


STEP 19 – How many milliliters are shown in the picture?

32



STEP 20 – How many cups are shown in the picture?



STEP 22 – How many cups are shown in the picture?

STEP 21 – How many liters are shown in the picture?

STEP 23 – ANSWERS

STEP 14: 1½ cups
STEP 15: 700 milliliters
STEP 16: 2 2/3 cups
STEP 17: 0.4 liter
STEP 18: 1 1/8 cups
STEP 19: 250 milliliters
STEP 20: 3 3/4 cups
STEP 21: 1.0 liter
STEP 22: 4 cups

Check Point

Can you read the two scales on the glass measure?

Do you know how to convert milliliters to liters?

Did you get all the answers right?

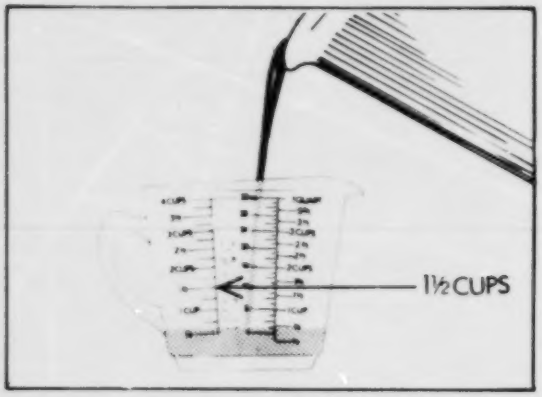
If you answered no to any of the questions, go back and redo the steps.

Instructional Objective IV

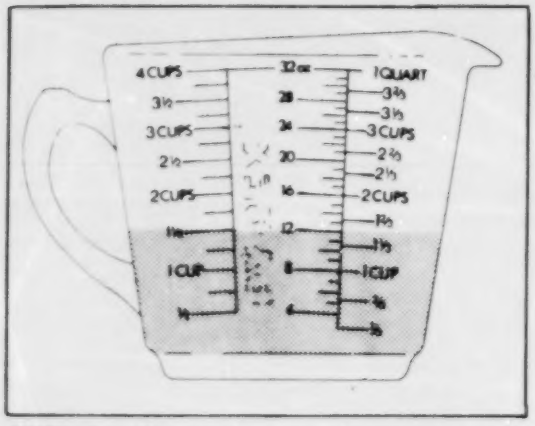
Using a glass measure, the student will measure 1½ cups of water.

Technique

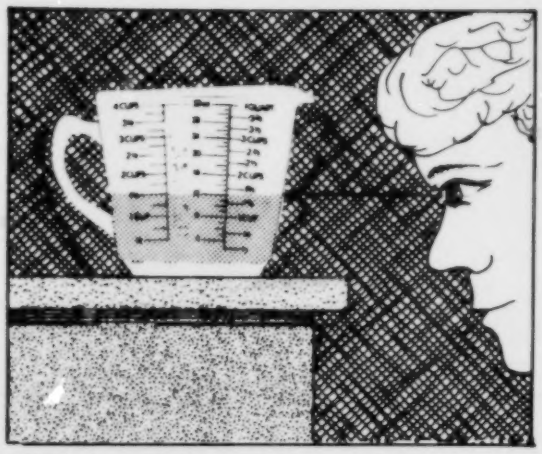
STEP 1 – Whether you read the results in cups or liters, the technique for measuring liquids is the same.



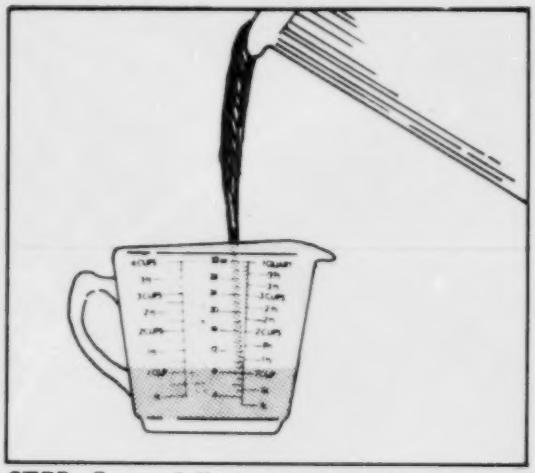
STEP 2 – Pour water slowly into the glass measure until filled to 1½ cups.



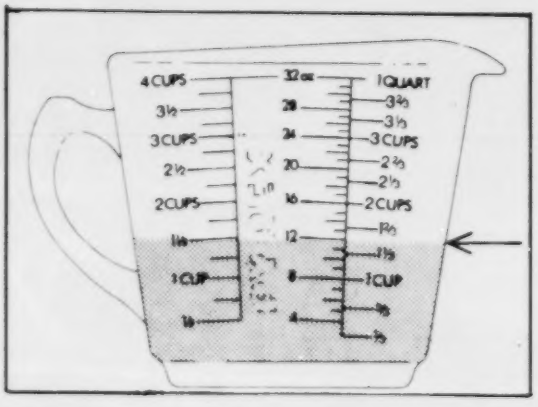
STEP 3 – Set measure on a level spot, allow liquid to still.



STEP 4 – Bend or stoop so that you can check your measurement at eye level.



STEP 5 – Adjust your measurement if necessary by pouring liquid out or adding more.



STEP 6 – If you had to adjust your liquid level, allow it to still. Check your new measurement at eye level, adjust again if necessary until measure is achieved.

Check Point

Did you allow the liquid to still?

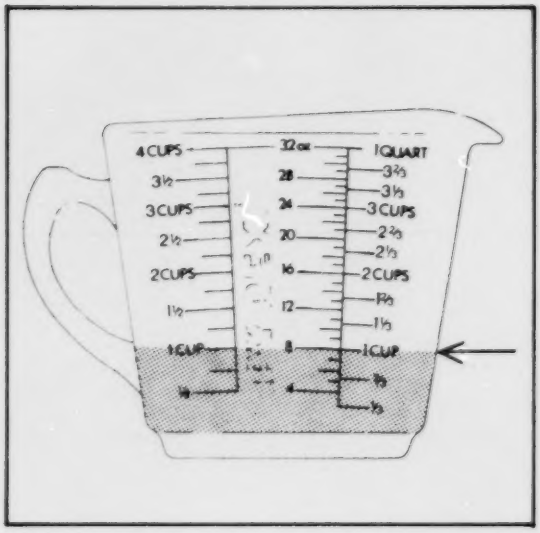
Did you check your measurement at eye level?

Did you re-check your measurement after adjusting it?

Instructional Objective V

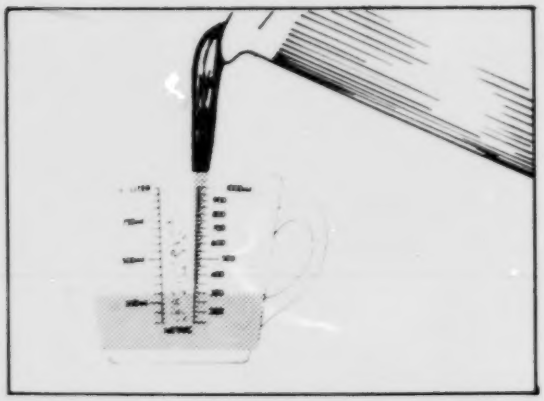
The student will compare the measurement relationships between common and metric measurements of liquids.

STEP 1 – Measure 1 cup of water.

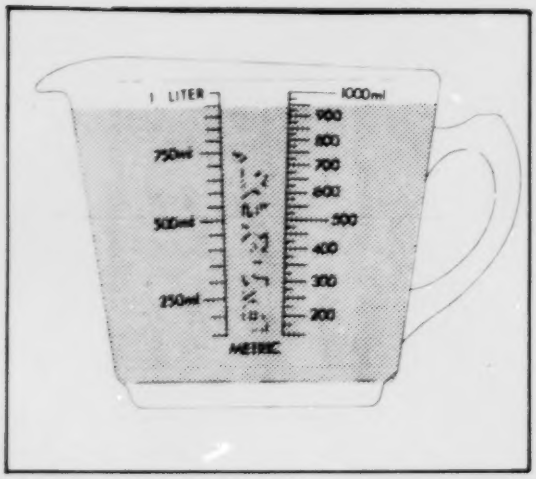


STEP 2 – Does your measure look like this? If so, turn your measure so that you can read the metric scale. How many milliliters equal 1 cup?

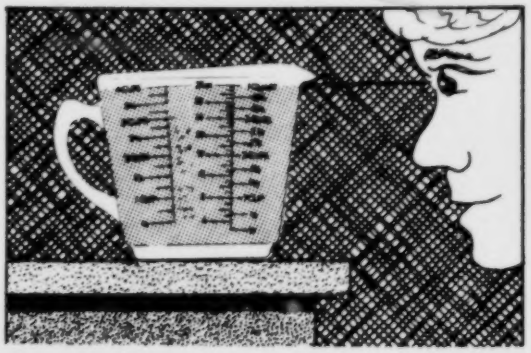
STEP 3 – 1 cup is about 250 milliliters.



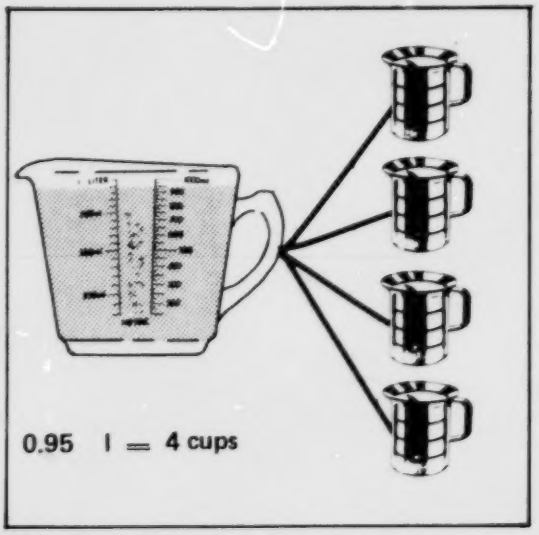
STEP 4 – Measure 0.95 liters of water. How many milliliters of water are you measuring?



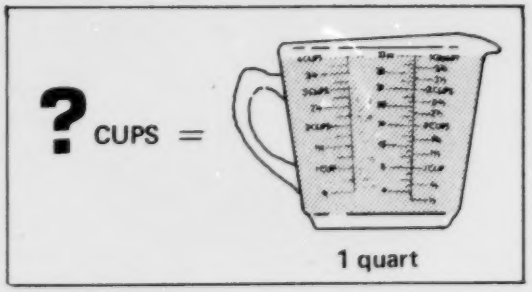
STEP 5 – 0.95 liters is equal to 950 milliliters.



STEP 6 – Look at the common scale on your glass measure. How many cups are equal to 0.95 liters?



STEP 7 – 0.95 liters is about 4 cups.



STEP 8 – How many cups equal 1 quart?

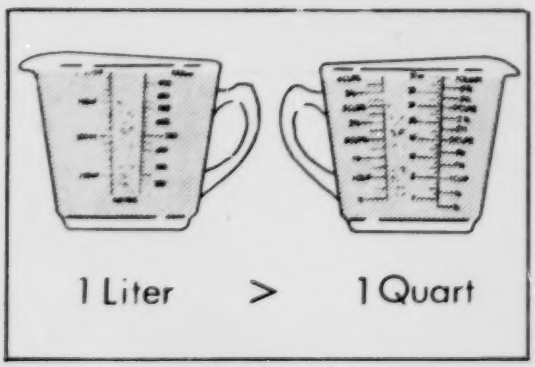
STEP 9 – Four cups equals one quart.

LARGER

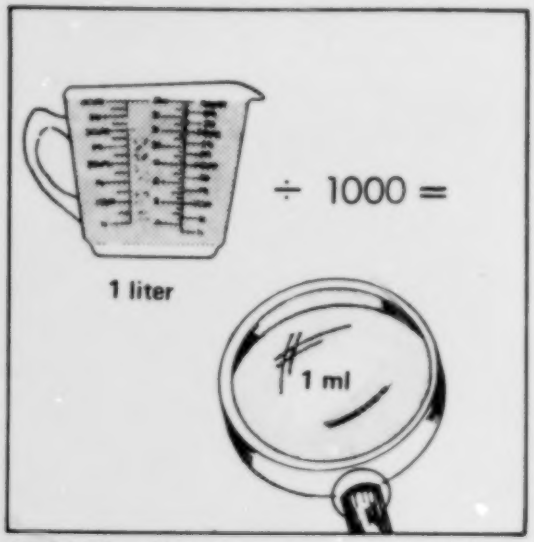
? 1 liter

? 1 quart

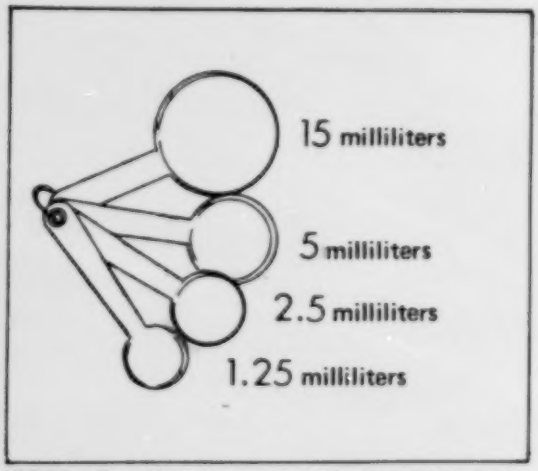
STEP 10 – Which is larger, 1 liter or 1 quart?



STEP 11 – One liter is larger, – not much larger - but one liter is bigger than one quart.



STEP 12 – Metric measures can also be used for small quantities.



STEP 13 – Metric spoons include: 1.25 milliliter, 2.5 milliliters, 5 milliliters, 15 milliliters.

Check Point

Get the handout for the Checkpoint for Objective V, Measuring Liquids, from your instructor.

Without looking in the Programmed Text, complete all the blanks on the handout by writing the amount asked for.

After you have filled in all the blanks, go back to your instructor and ask to see the master to check your answers.

If your answers are correct, go on to another programmed text. If your answers are wrong, redo the steps and the Checkpoint.

INTRODUCTION

The Food Service industry has to weigh and measure foods accurately. Special techniques are common throughout the industry to make sure that a recipe prepared by someone in South Carolina can be produced anywhere in the world. You will be learning how to weigh and measure ingredients accurately so that you can follow a simple recipe.

GOALS

1. The student will become familiar with the various tools and equipment used in weighing and measuring.
2. The student will learn the techniques used in weighing and measuring.
3. The student will become familiar with equivalent measures.
4. The student will understand the relationship between metric and common measures.

DIRECTIONS

Do not write in this booklet.

Get all handouts from your instructor.

Make sure you have all the material you need to complete the activity; check against the materials list.

Start with Instructional Objective I. Complete all the steps in the order given and then do the Checkpoint. After the Checkpoint is completed, go on to the next objective.

When doing the activities, try to be very neat with the sand and water.

MATERIAL

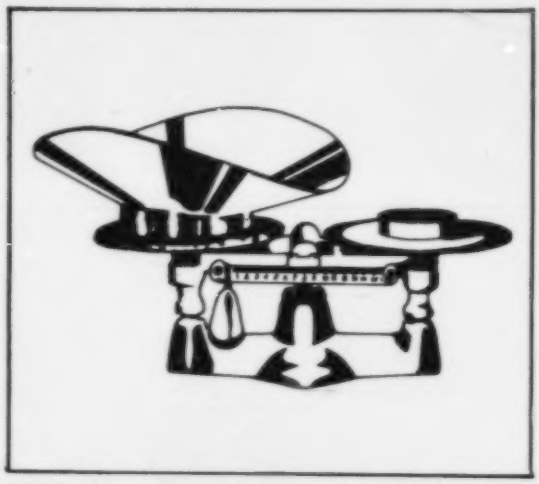
25 pound kitchen scale dial
25 pound kitchen scale
Set of weights

PROGRAMMED TEXT

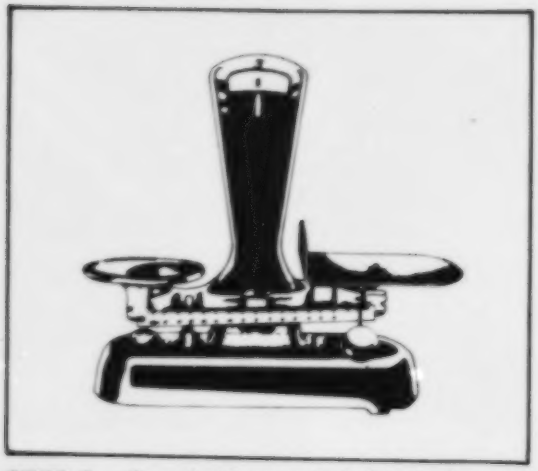
Instructional Objective I

The student will identify the various scales used for weighing.

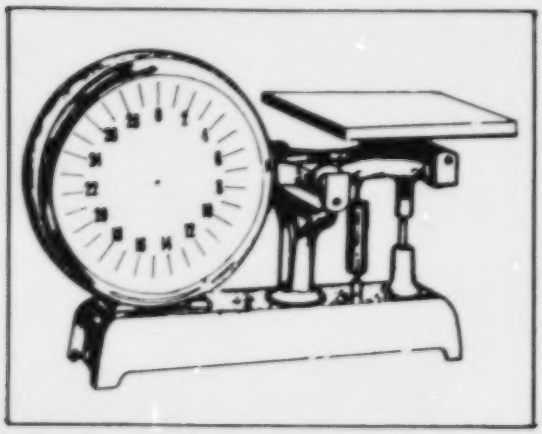
STEP 1 – Many different types of scales are used in food service work, weighing from fractions of an ounce to hundreds of pounds. Scales are made for special purposes.



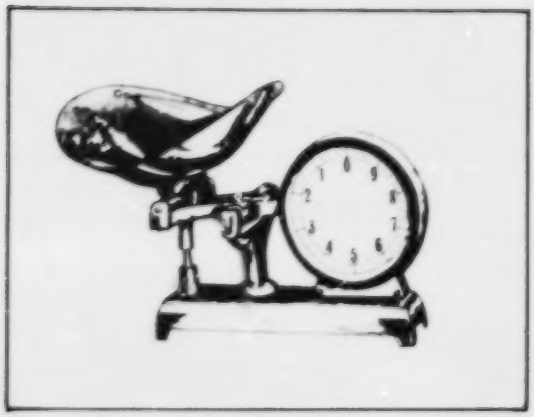
STEP 2 – Baker's Scale is used for easy weighing of powdery ingredients with great accuracy.



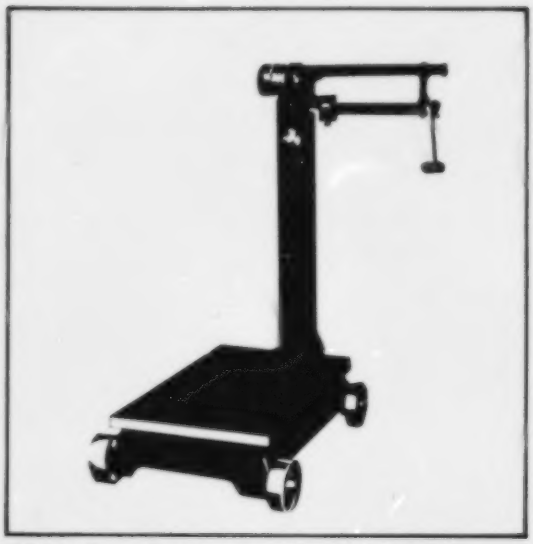
STEP 3 – Even-balance scale is ideal wherever a scale with the "over-and-under" type chart is required.



STEP 4 – Platform scale for general work.



STEP 5 – Platform scale for use with loose ingredients.



STEP 6 – Platform scale with 1000 pound capacity is used to check orders when received.

STEP 7 – Portion scale weighs up to 32 ounces and used for very precise weights.

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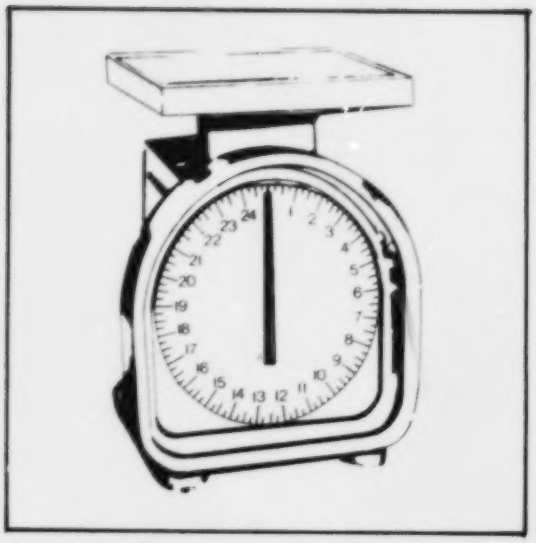


STEP 8 – General or Kitchen Scale weighs up to 25 pounds – a very useful scale.

Instructional Objective II

Using a mock-up of a dial-face from a 25 pound kitchen scale, the student will identify the markings on the scale in terms of pounds and ounces.

STEP 1 – This is a scale which has a 25 pound limit. It is often called a general scale or a kitchen scale.

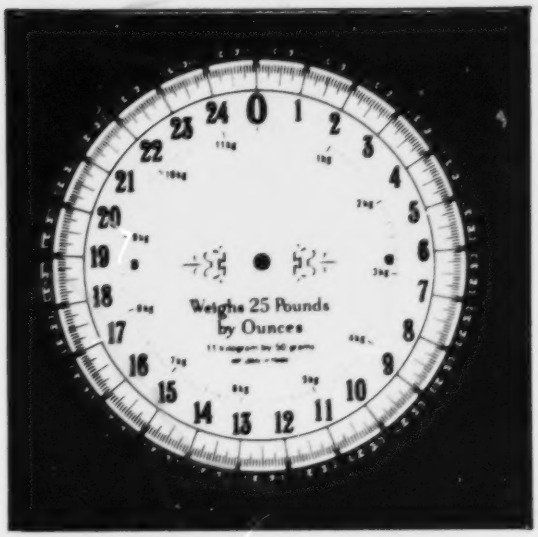
Check Point

Get the handout for the Checkpoint for Instructional Objective I, Weighing, from your instructor.

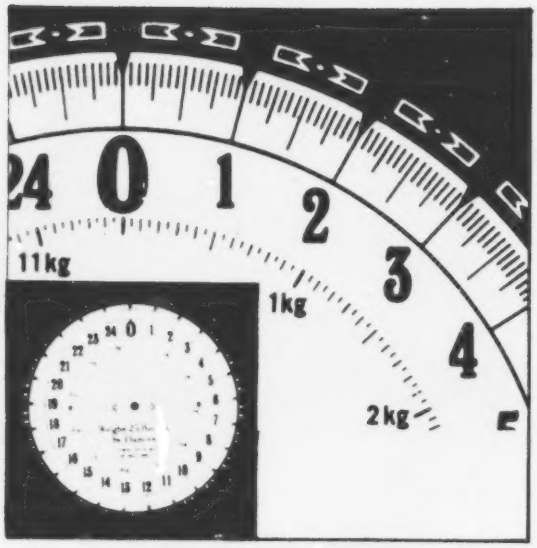
Without looking in the programmed text, identify the weight scales by placing the letter that is by the picture in the blank space next to its name.

After you have filled in all the blanks, go back to your instructor and ask to see the master to check your answers.

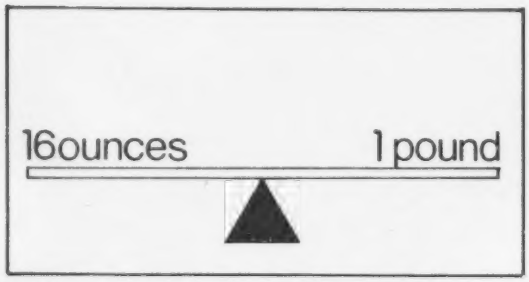
If your answers are correct, go on to the next objective. If your answers are wrong, redo the steps and the Checkpoint.



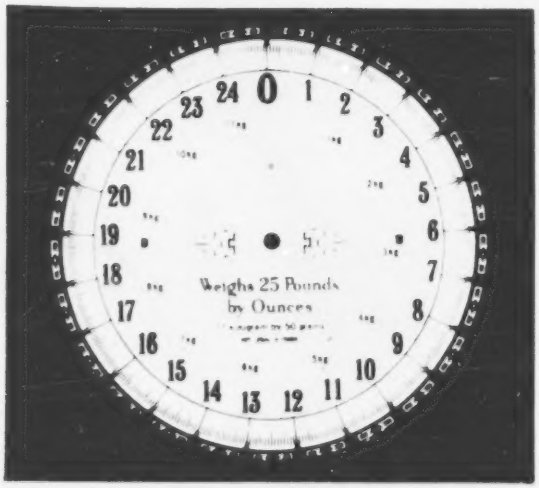
STEP 2 – Look closely at the dial. Note that 25 pounds is the limit for this scale.



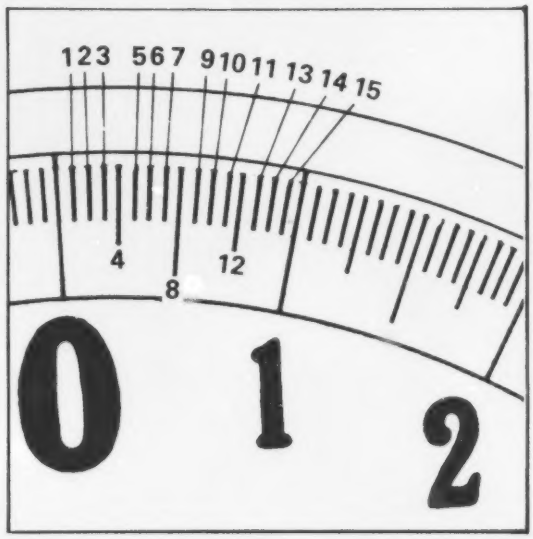
STEP 3 — Looking closely at the dial face we see that every pound has been divided into 16 equal parts. Count them.



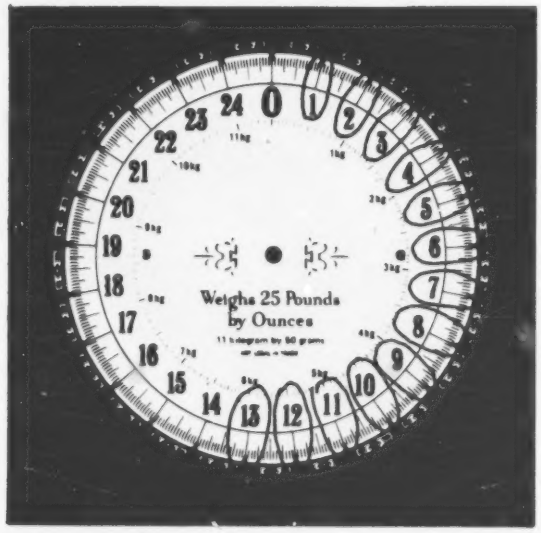
STEP 4 — Sixteen ounces always equals one pound.



STEP 5 — Note on the entire scale face that the pound and ounce markings are the same all the way around.

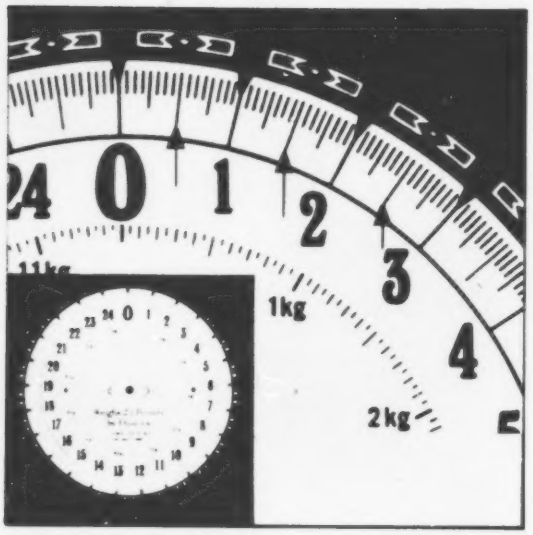


STEP 6 — Each of these 16 markings is an ounce since there are 16 ounces in every pound. Notice that 4 ounce, 8 ounce, 12 ounce and pound have different marks from the other ounces.

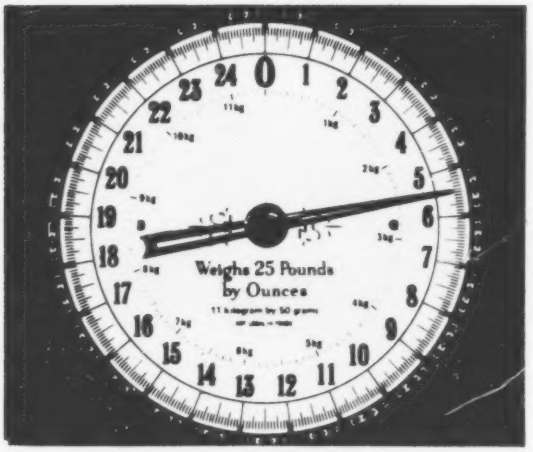


STEP 7 — The pound marks are the longest and each pound is indicated by a number on the scale. One pound, two pounds, three pounds, etc.

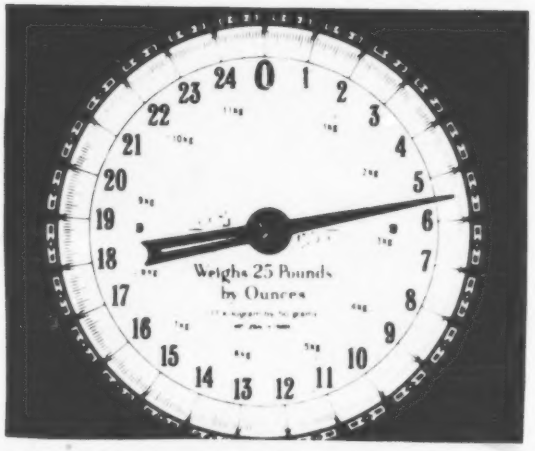
41



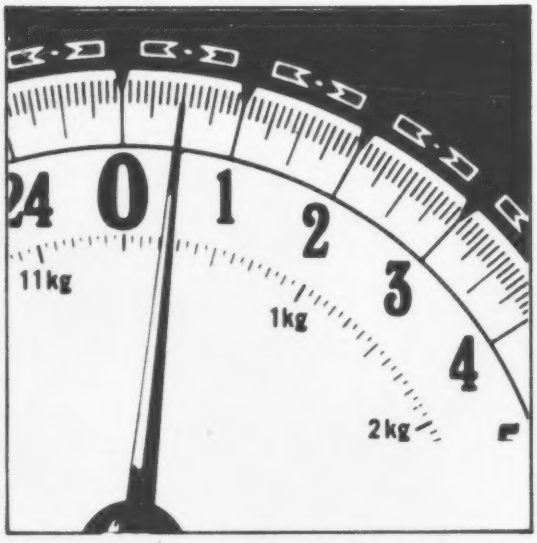
STEP 8 – Notice that the 8 ounce mark in every pound is just slightly shorter than the pound mark.



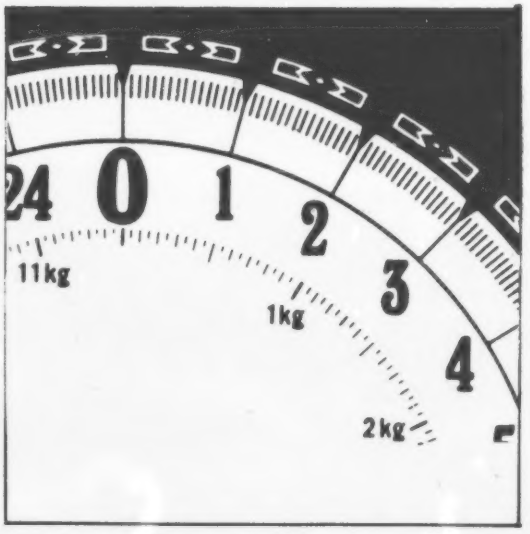
STEP 10 – What does the scale now read?



STEP 11 – 5 pounds, 8 ounces or 5 ½ pounds.

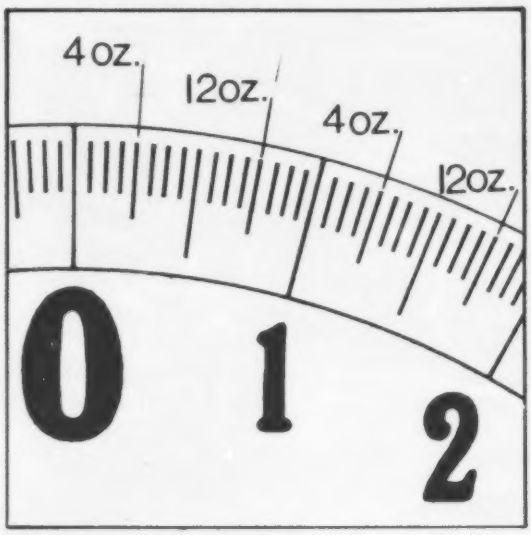


STEP 9 – This scale now reads 8 ounces or one-half pound; 8 ounces is ½ pound. Either reading is correct.

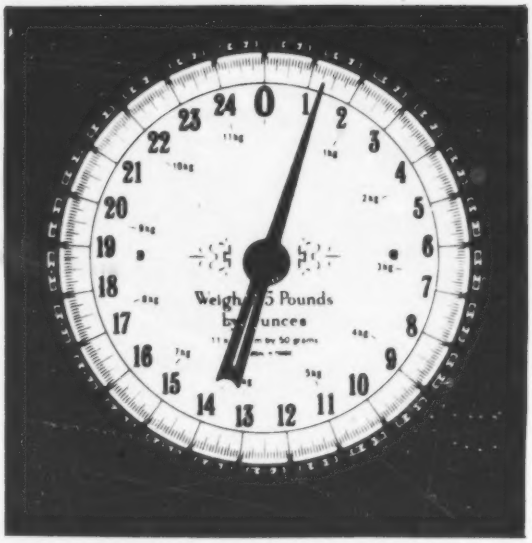


STEP 12 – If the dial had mostly dots – see how hard it would be to read.

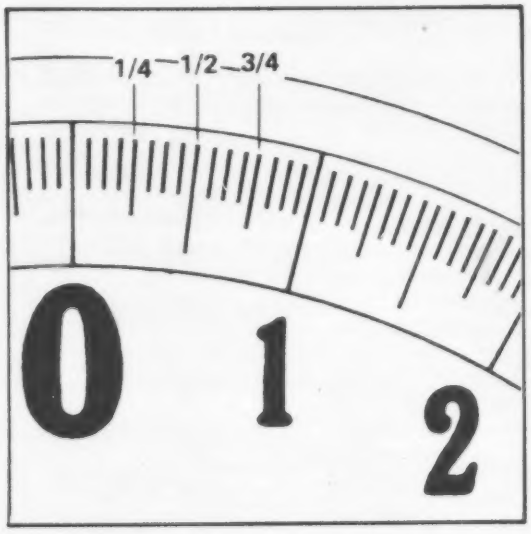
42



STEP 13 – There are short lines to help you count the ounces. You will find a short line at the 4 ounce and 12 ounce space of every pound.

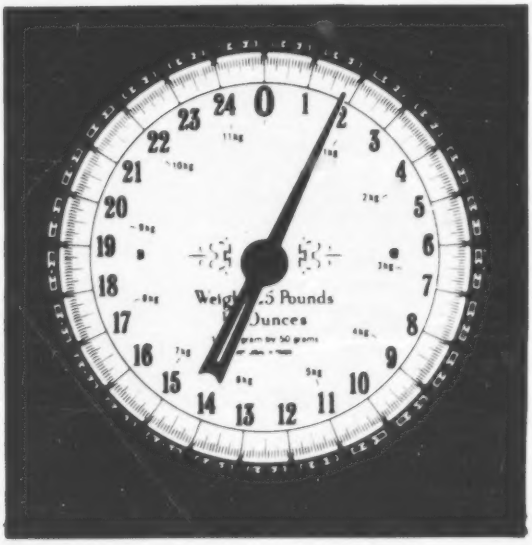


STEP 15 – The indicator is now pointing to one pound, 4 ounces or 1¼ pounds.

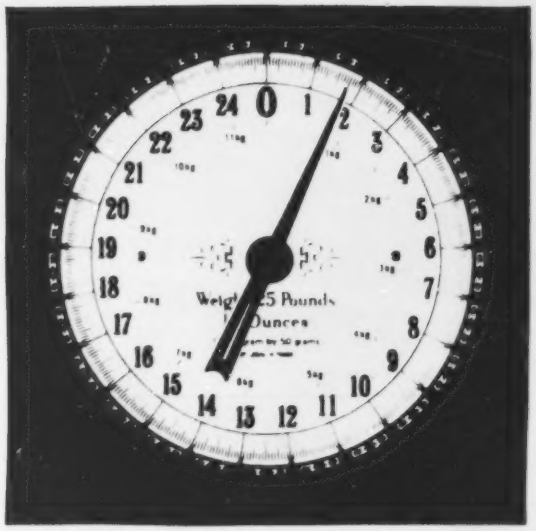


STEP 14 – Since there are 16 ounces in every pound -

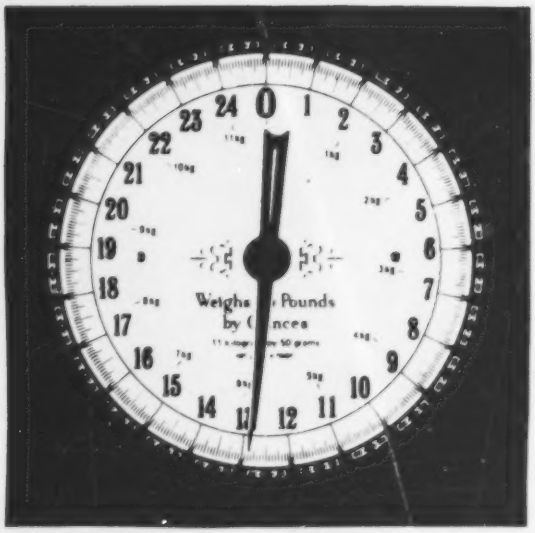
4 ounces is ¼ pound
8 ounces is ½ pound
12 ounces is ¾ pound



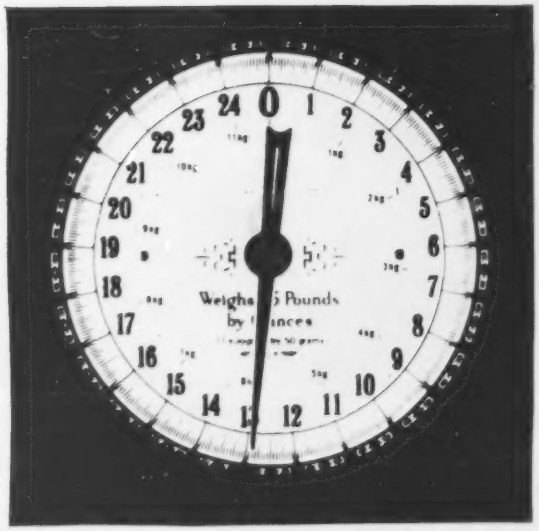
STEP 16 – What does the scale read?



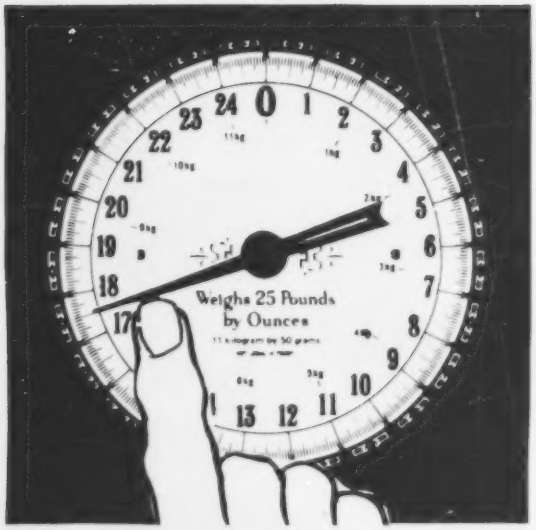
STEP 17 – 1 pound, 12 ounces or 1¾ pounds.



STEP 19 – 12 pounds, 14 ounces.



STEP 18 – What weight is indicated?



STEP 20 – Now – practice using the plastic 25 pound scale face. Set the indicator dial in various positions and read the weights.

Check Point

Get the handout for the checkpoint for Instructional Objective II, Weighing, from your instructor.

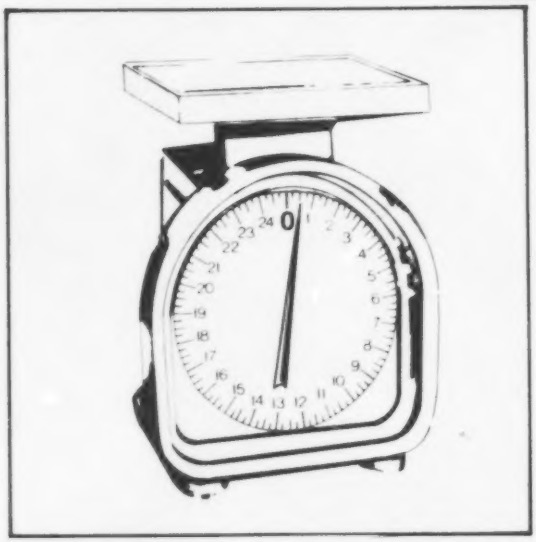
Look at each dial and circle the letter that has the weight that is shown on the dial.

After you have given an answer for all five dials, go back to your instructor and ask to see the master to check your answers.

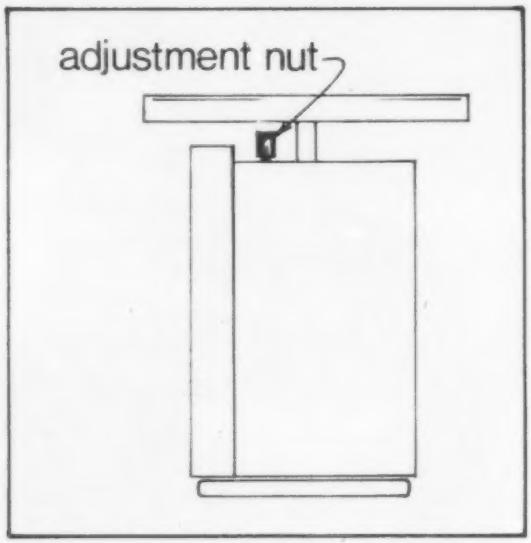
If your answers are correct, go on to the next objective. If your answers are wrong, redo the steps and the Checkpoint.

Instructional Objective III

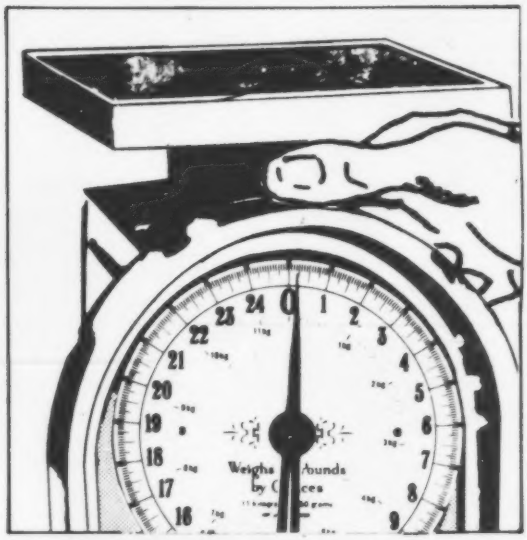
The student will adjust a kitchen scale to zero before weighing.



STEP 1 – When you are ready to use the kitchen scale, the indicator may not be exactly on zero (0).



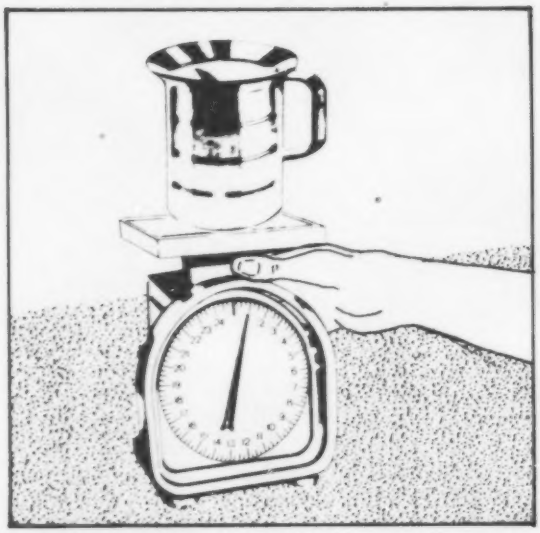
STEP 2 – Under the top platform of the kitchen scale is a nut that can be turned to adjust the scale.



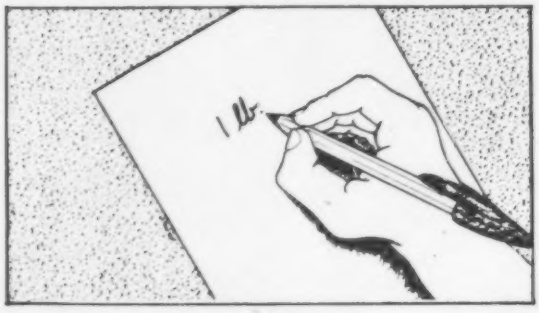
STEP 3 – It may not always be possible to adjust the indicator to zero (0) because it is sometimes only good for approximately eight (8) ounces in either direction.

STEP 4 – Never place food on the platform of the scale without first placing wax paper on the platform or using a container.

STEP 5 – When you are going to weigh something in a container, first place the container on the platform of the scale.

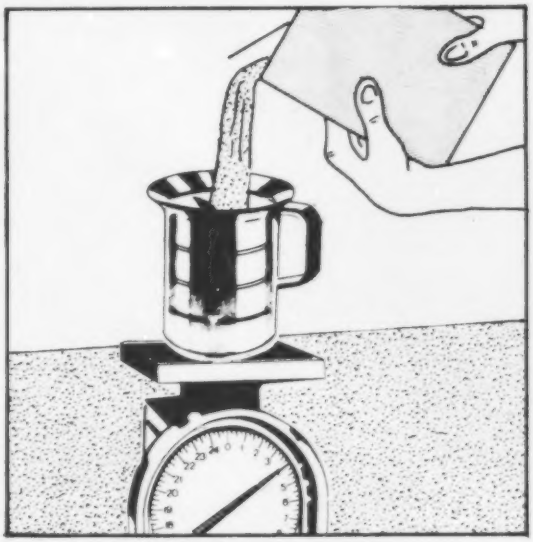


STEP 6 – Turn the adjustment nut to the closest pound.

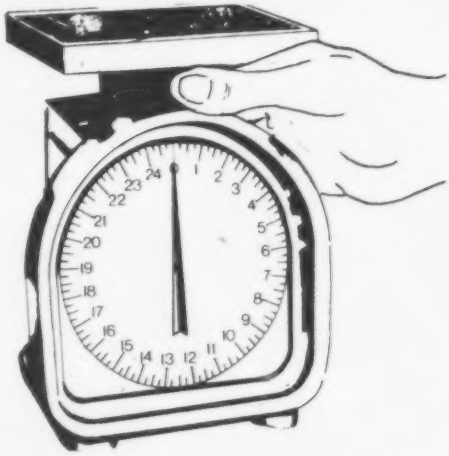


STEP 7 – Write this weight down on a piece of paper.

STEP 8 – To the weight you wrote down, add the weight of the ingredients you are to weigh.



STEP 9 – Place ingredients in the container until you reach the total weight you came up with.



STEP 10 – Take container off of the scale and reset indicator to zero (0).

Check Point

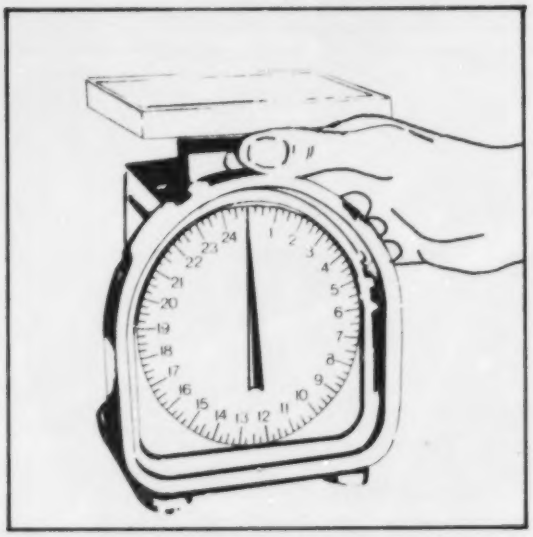
How do you adjust the scale to read zero (0)?

If you don't use a container when weighing ingredients, what should you place on the platform of the scale?

When you have to use a container to weigh ingredients, do you know the method for doing this?

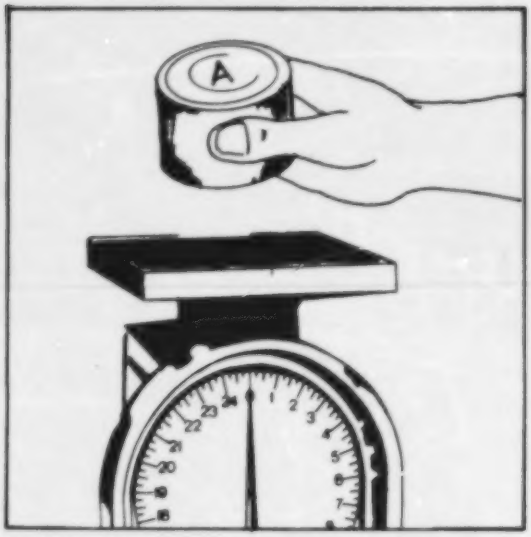
Instructional Objective IV

The student will weigh a set of pre-determined weights on a kitchen scale.

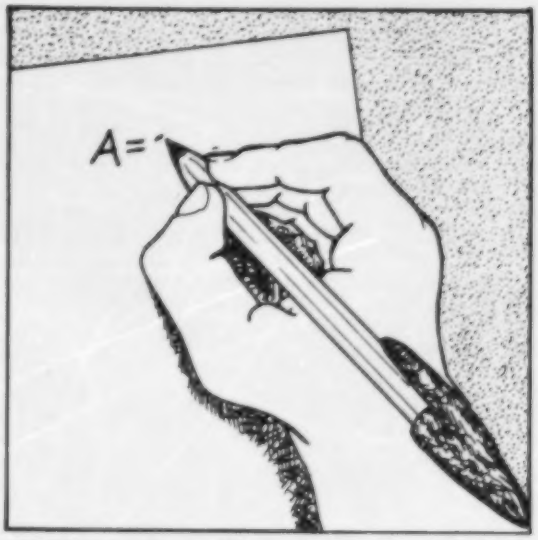


STEP 1 – Check to see that the indicator on the scale is reading zero (0). If it isn't, adjust it to read zero (0).

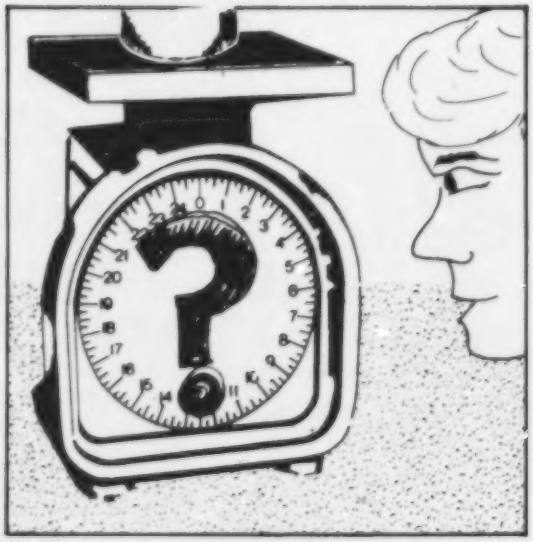
STEP 2 – Make sure that you have the set of weights that are for the kitchen scale.



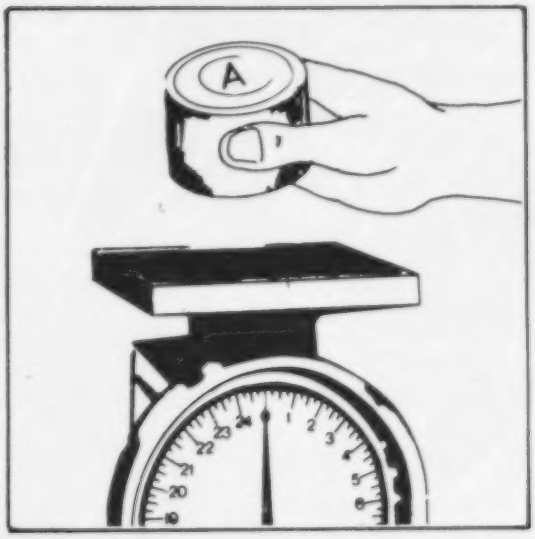
STEP 3 – Take the weight labeled "A" and place it on the platform of the kitchen scale.



STEP 5 – On a piece of paper, write down the letter "A," and next to it, place the weight of weight "A."



STEP 4 – Look at the face of the scale to see what the indicator is reading.



STEP 6 – Take weight "A" off the scale and place it back in the box.

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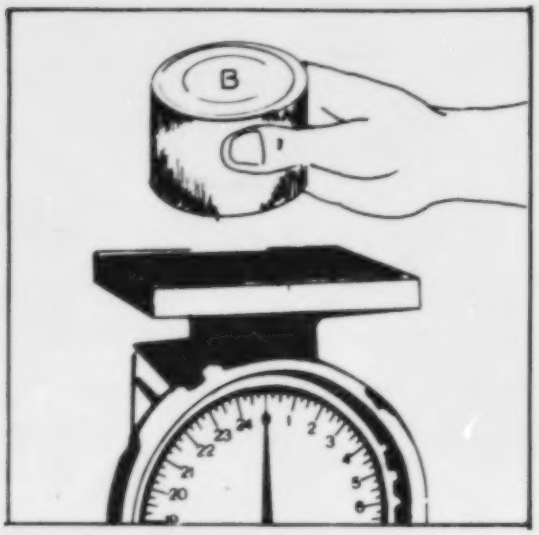
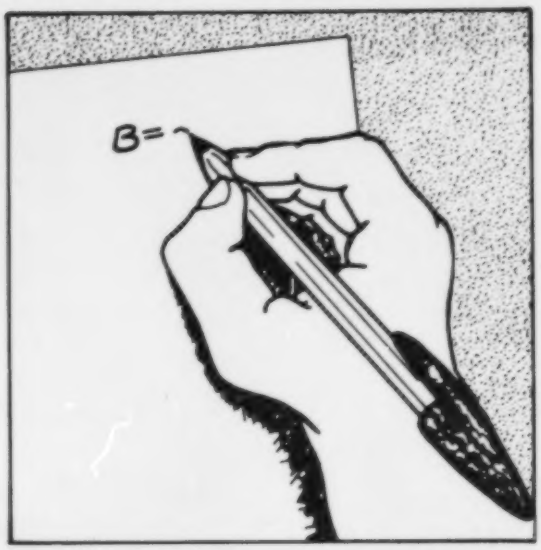
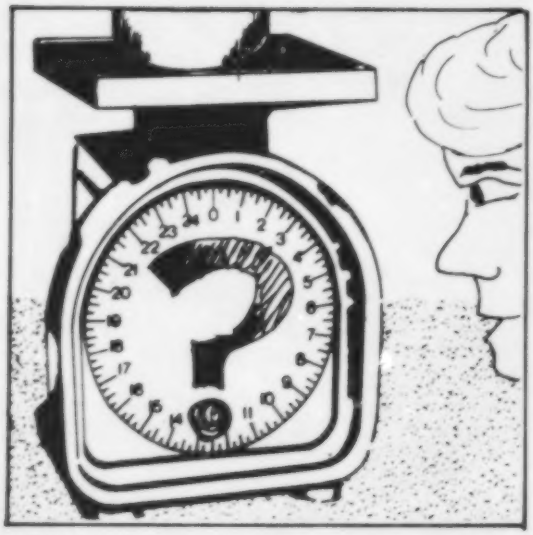


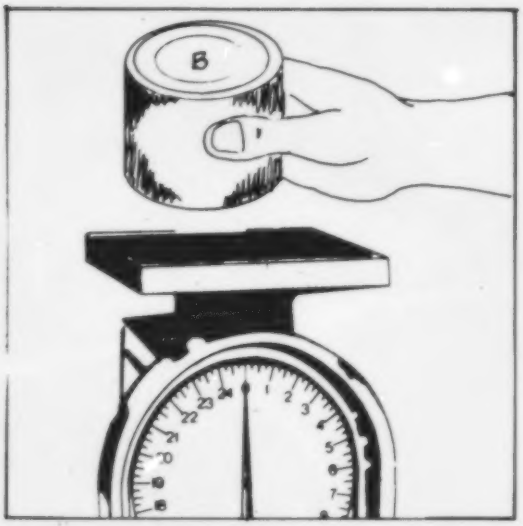
STEP 7 – Take the weight labeled "B" and place it on the platform of the kitchen scale.



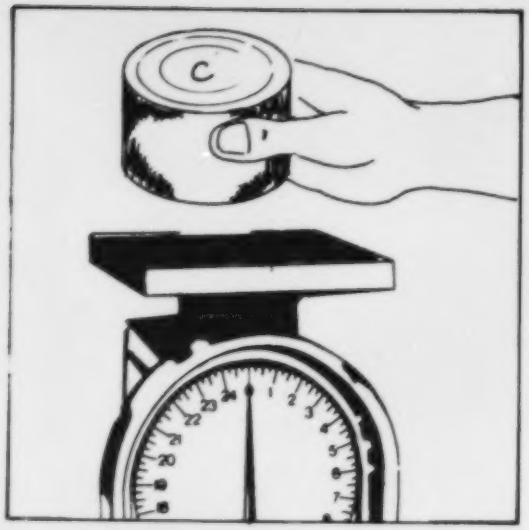
STEP 9 – On a piece of paper, write down the letter "B," and next to it, place the weight of weight "B."



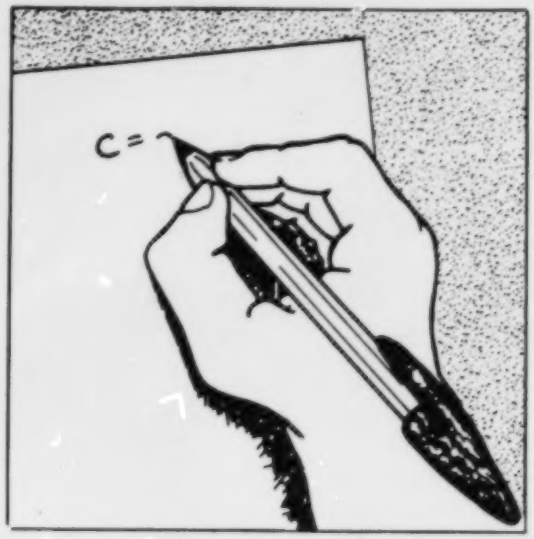
STEP 8 – Look at the face of the scale to see what the indicator is reading.



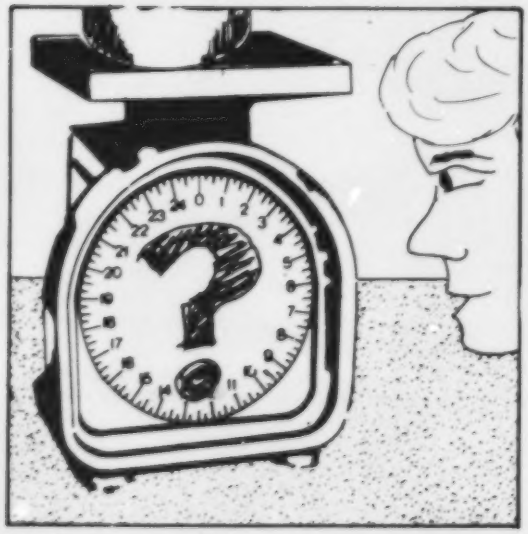
STEP 10 – Take weight "B" off the scale and place it back in the box.



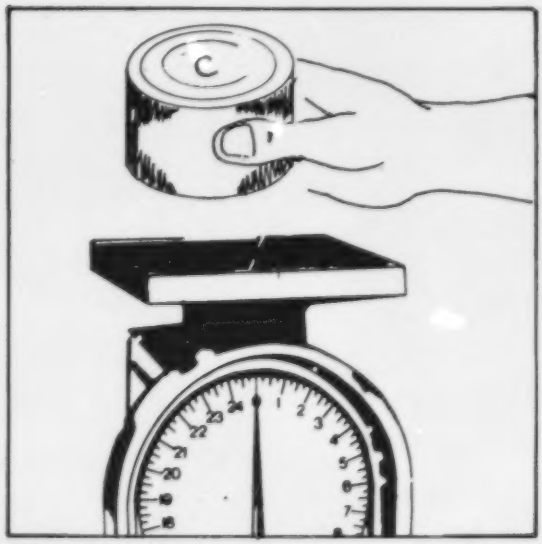
STEP 11 – Take the weight labeled "C" and place it on the platform of the kitchen scale.



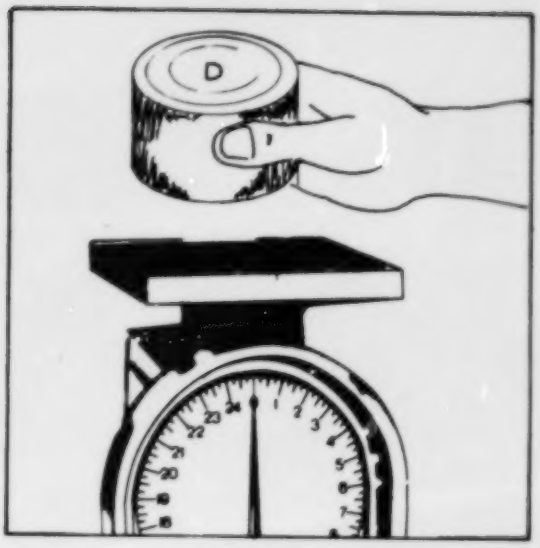
STEP 13 – On a piece of paper, write down the letter "C," and next to it, place the weight of weight "C."



STEP 12 – Look at the face of the scale to see what the indicator is reading.

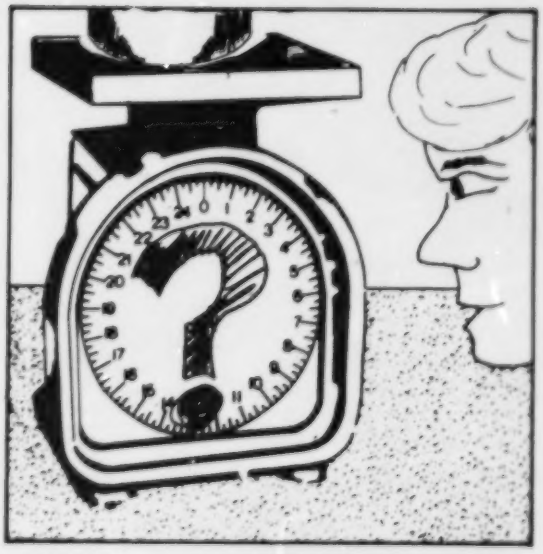


STEP 14 – Take weight "C" off the scale and place it back in the box.

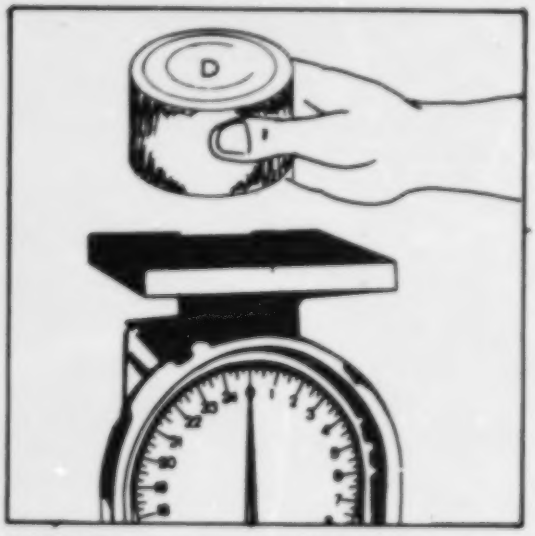


STEP 15 – Take the weight labeled "D" and place it on the platform of the kitchen scale.

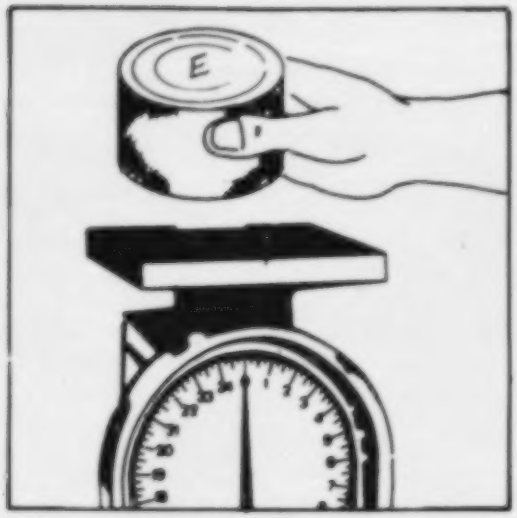
STEP 17 – On a piece of paper, write down the letter "D," and next to it, place the weight of the weight "D."



STEP 16 – Look at the face of the scale to see what the indicator is reading.

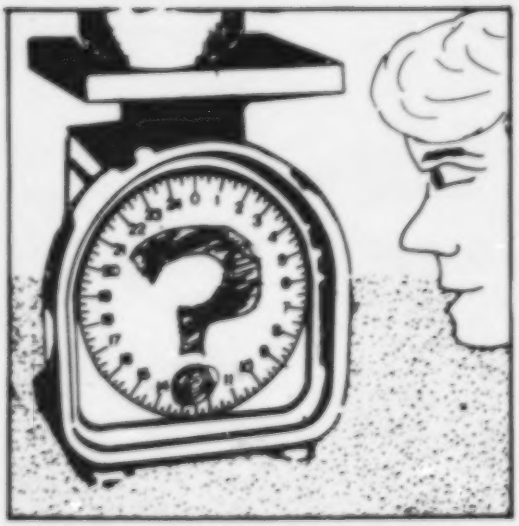


STEP 18 – Take weight "D" off the scale and place it back in the box.

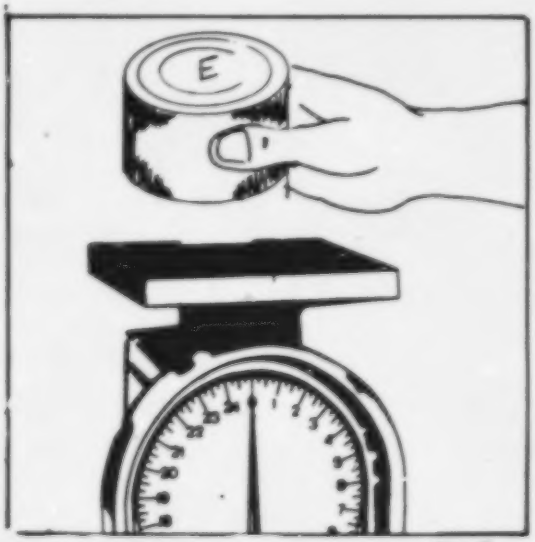


STEP 19 – Take the weight labeled "E" and place it on the platform of the kitchen scale.

STEP 21 – On a piece of paper, write down the letter "E," and next to it, place the weight of weight "E."



STEP 20 – Look at the face of the scale to see what the indicator is reading.



STEP 22 – Take weight "E" off the scale and place it back in the box.

WEIGHT

A = 2½ lbs. ± 2oz.

B = 11oz. ± 2oz.

C = 5 lbs. ± 2oz.

D = 4lbs. 14oz. ± 2oz.

E = 3¾ lbs. ± 2oz.

STEP 23 – Here are the answers for weights A through E. You should not be off more than 2 ounces in either direction.

Check Point

Did you adjust the scale to read zero?

Did your answers match those in Step 23?

If your answers were off more than 2 ounces, redo the steps.

If your answers are correct, go on to another programmed text.

MEASURING SOLIDS

INTRODUCTION

The Food Service industry has to weigh and measure foods accurately. Special techniques are common throughout the industry to make sure that a recipe prepared by someone in South Carolina can be produced anywhere in the world. You will be learning how to weigh and measure ingredients accurately so that you can follow a simple recipe.

GOALS

1. The student will become familiar with the various tools and equipment used in weighing and measuring.
2. The student will learn the techniques used in weighing and measuring.
3. The student will become familiar with equivalent measures.
4. The student will understand the relationship between metric and common measures.

DIRECTIONS

Do not write in this booklet.

Get all handouts from your instructor.

Make sure you have all the material you need to complete the activity. Check it against the materials list.

Start with Instructional Objective I. Complete all the steps in the order given and then do the Checkpoint. After the Check-Point is completed, go on to the next objective.

When doing the activities, try to be very neat with the sand and water.

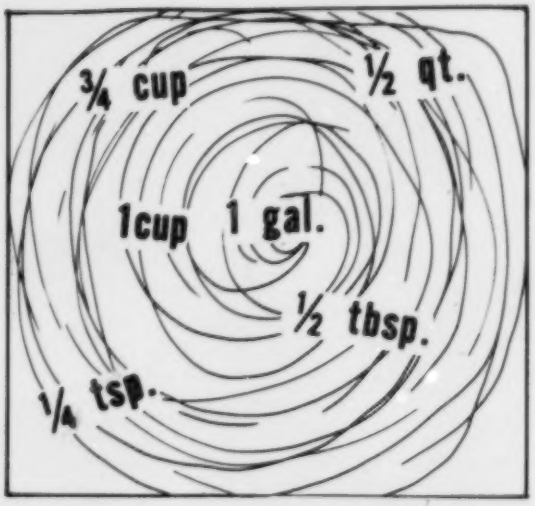
MATERIAL

Measuring spoon set,
(¼ tsp., ½ tsp., 1 tsp., 1 tbsp.)
Mary Ann cup set (¼ cup, 1/3 cup, ½ cup, 1 cup)
Dry measure (1 pt.)
teaspoon
10" (25.4 cm) flat spatula
1 pint container with sand
pie pan

PROGRAMMED TEXT

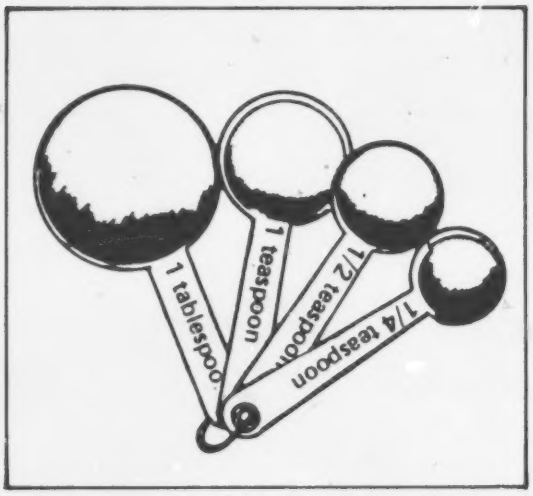
Instructional Objective I

The student will identify the measurement tools used for solids.

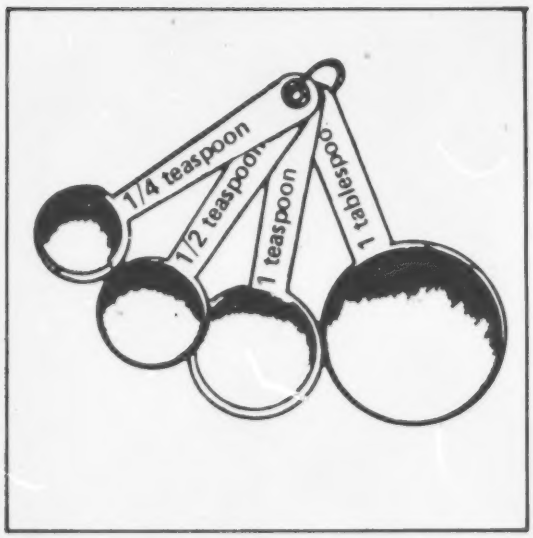


STEP 1 – Measurements are often used in food service.

STEP 2 – Teaspoons and tablespoons are often called for in recipes. What type of measurement tool do you use to measure them?

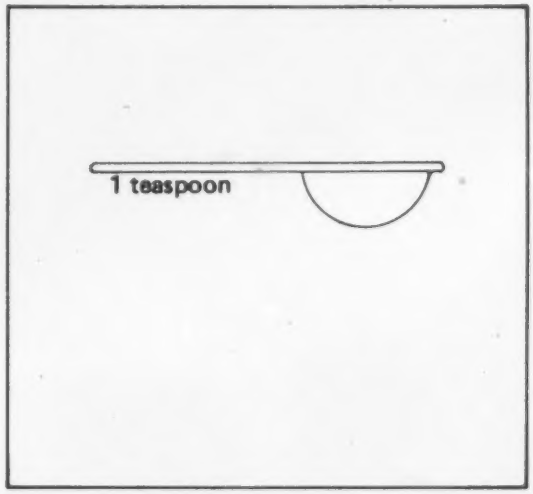


STEP 3 – A standard measuring spoon set should be used when measuring teaspoons or tablespoons.

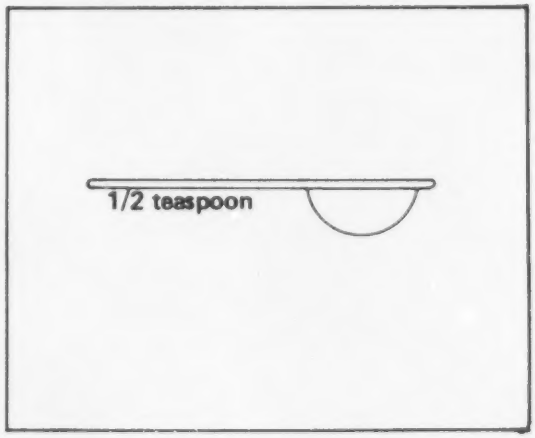


STEP 4 – Notice that the name of each of the measuring spoons is written on it.

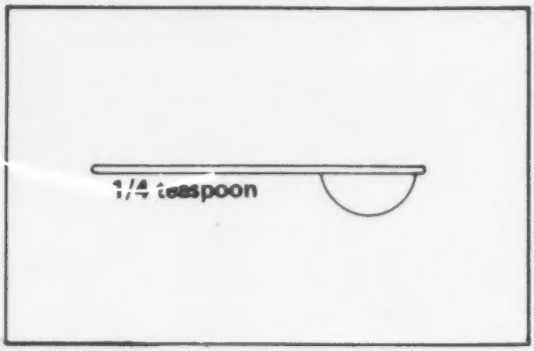
STEP 5 – A measuring spoon set includes one tablespoon.



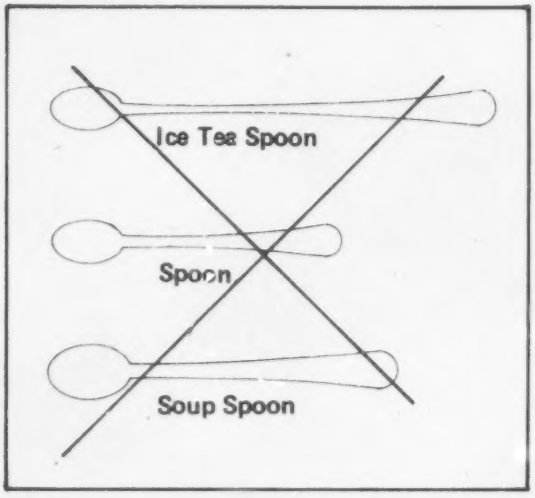
STEP 6 – One teaspoon.



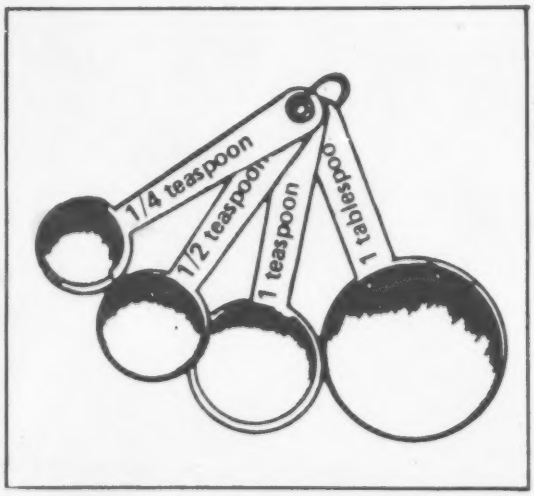
STEP 7 – One-half teaspoon



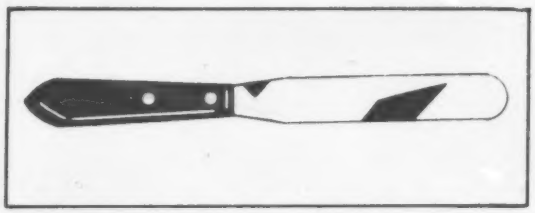
STEP 8 – One-fourth teaspoon



STEP 9 – Never use tableware as measuring spoons.

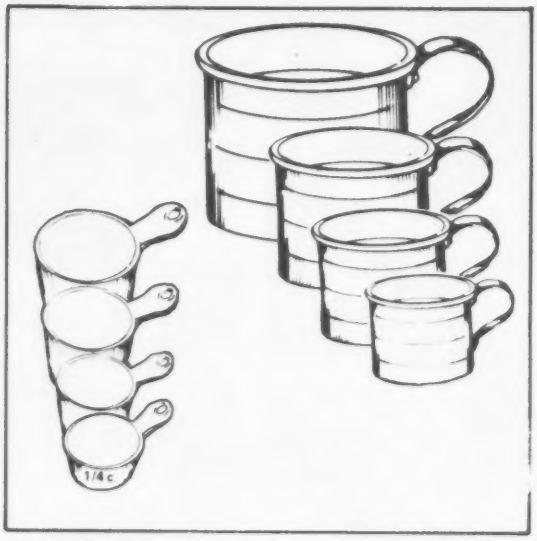


STEP 10 – When measuring teaspoons or tablespoons, always use a measuring spoon set.

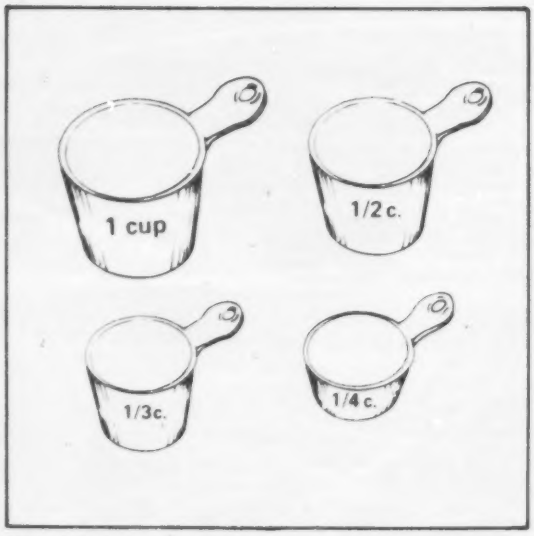


STEP 11 – This is a spatula. It has a straight edge on both sides. You use this tool to help you measure correctly.

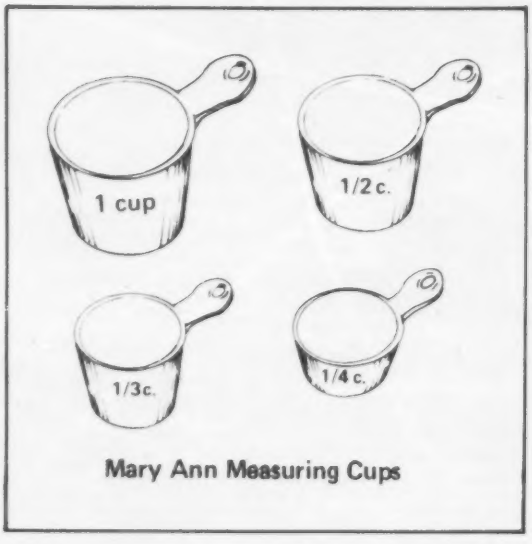
STEP 12 – What measuring instruments do you use to measure quantities greater than 1 tablespoon?



STEP 13 – You could use any of a variety of larger measures. Let's look at each of these in greater detail.

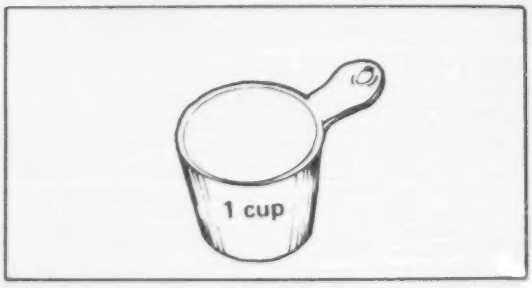


STEP 14 – A nesting measuring cup set. This set of measuring cups is often called Mary Ann cups.

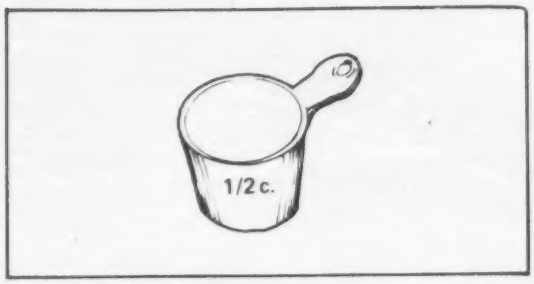


Mary Ann Measuring Cups

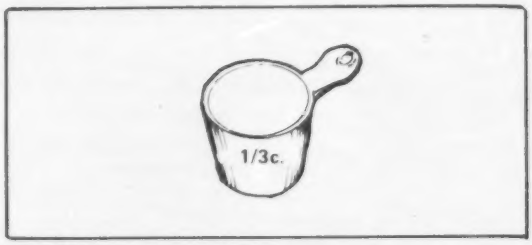
STEP 15 – Notice that each of these measures has its volume written on it.



STEP 16 – A set of Mary Ann measures includes: One cup

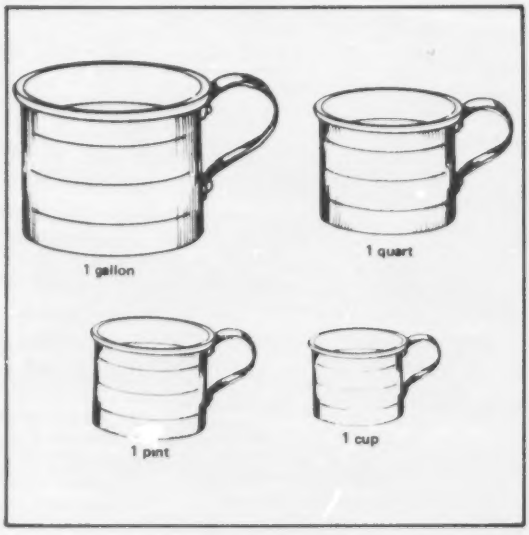


STEP 17 – One-half cup



STEP 18 – One-third cup

STEP 19 – One-fourth cup



STEP 20 – Dry measures are used to measure one or more cups of solid or powdery foodstuff.

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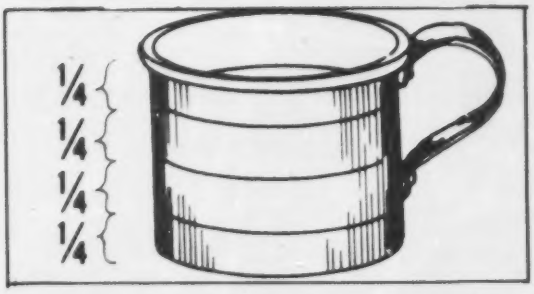
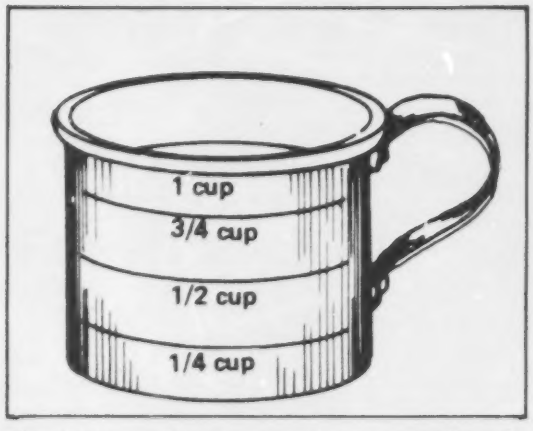
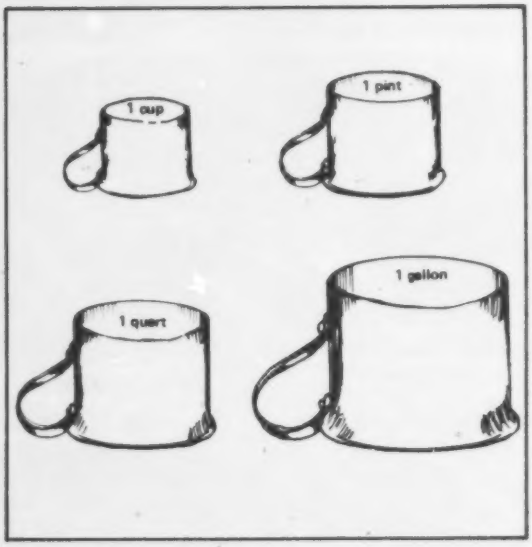
STEP 21 – Never use drinking cups as measuring cups.



STEP 22 – All dry measures are divided into fourths.



STEP 23 – This one cup dry measure has the raised marking named. Some dry measures expect you to be able to figure out the amounts indicated by counting the raised markings.



STEP 24 – Most commercial measures are labeled on the bottom to identify their size.

Check Point

Get the handout for the Checkpoint for Instructional Objective I, Measuring Solids, from your instructor.

Without looking in the programmed text, identify the measurement tools by placing the letter that is by the picture in the blank space next to its name.

After you have filled in all the blanks, go back to your instructor and ask to see the master to check your answers.

If your answers are correct, go on to the next objective. If your answers are wrong, redo the steps and the Checkpoint.

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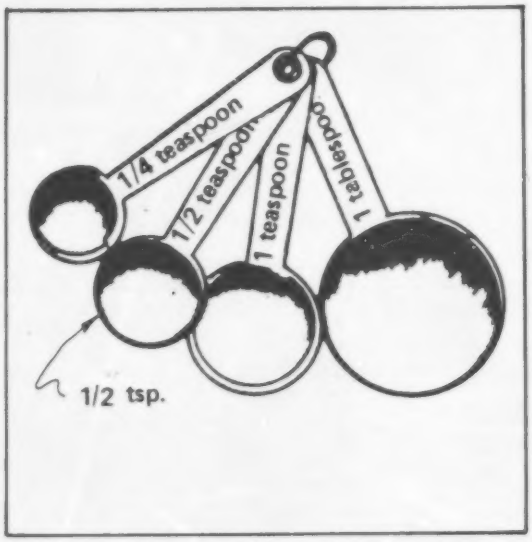
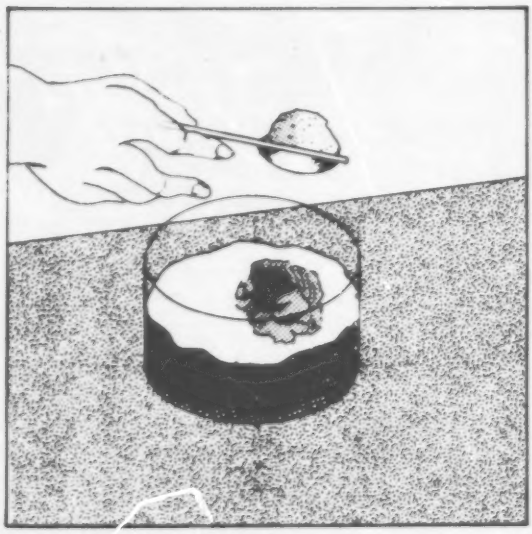
Instructional Objective II

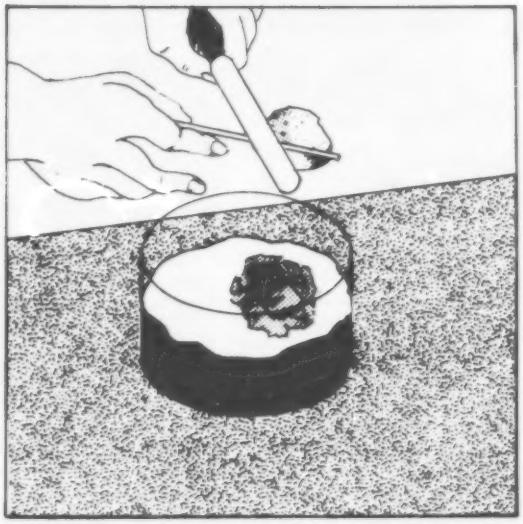
Using a measuring spoon, the student will measure a ½ teaspoon of sand.



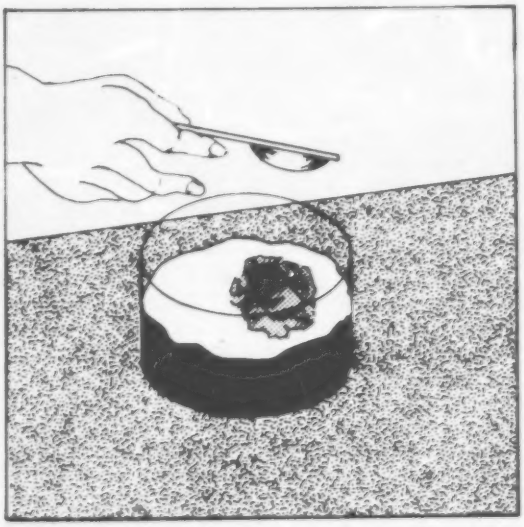
STEP 1 – Select the measuring spoon that is a ½ teaspoon.



STEP 2 – Overfill the measuring spoon by dipping into the container of sand.



STEP 3 – Use the blade edge of the spatula to level the ingredient. Hold the spoon over the container to avoid waste.



STEP 4 – That's it! That's all there is to using a measuring spoon set.

Check Point

Did you use the correct measure?

Did you use the proper technique?

If you answer no, put sand back in container and redo Instructional Objective II.

If you answer yes, continue to the next objective.

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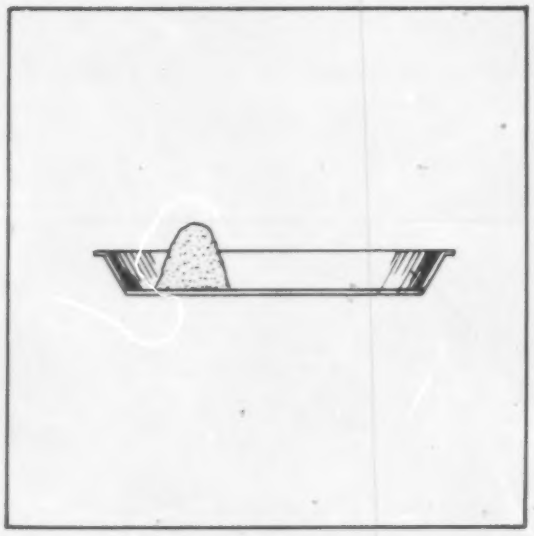
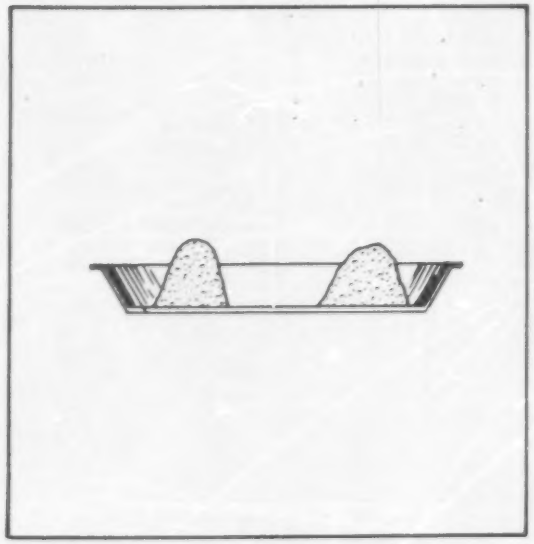
Instructional Objective III

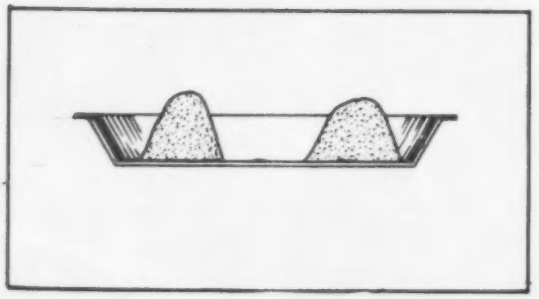
The student will recognize the measurement relationship between a teaspoon and a tablespoon.



STEP 1 – Measure 3 teaspoons of sand into a mound on one side of a pie pan.



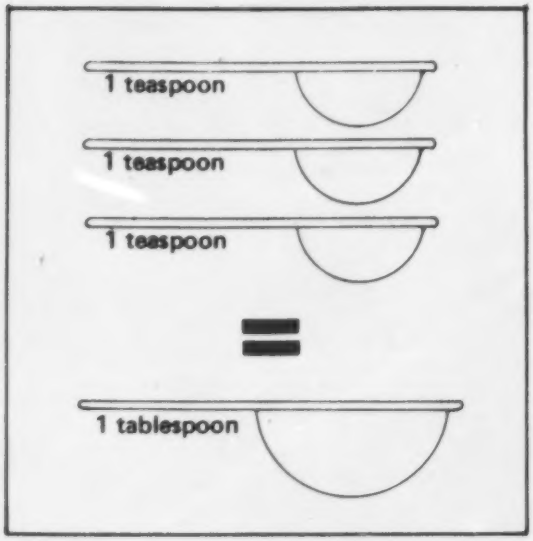
STEP 2 – Measure one tablespoon of sand into a mound on the other side of the pie pan.



STEP 3 – How do the mounds of sand compare? Which is larger? Let's find out.

STEP 4 – Use the level teaspoon and fill the tablespoon with sand. Remember, one level teaspoon of sand at a time.

STEP 5 – How many teaspoons did it take to fill the tablespoon?



STEP 6 – If your technique was correct, you should have used 3 teaspoons to fill the tablespoon. Three teaspoons equals one tablespoon.

IMPORTANT:

3 Teaspoons = 1 Tablespoon

STEP 7 – Remember this fact: 3 teaspoons = 1 tablespoon.

Check Point

How many teaspoons equal 1 tablespoon?

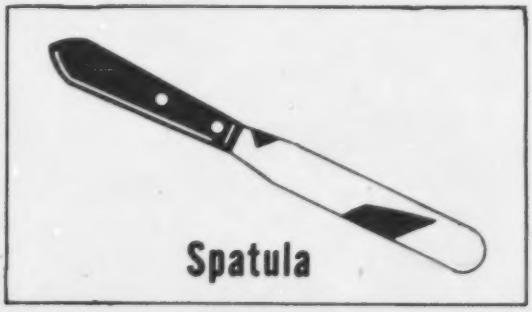
Did you measure the teaspoons so that three (3) teaspoons equaled one (1) tablespoon?

Instructional Objective IV

Using a Mary Ann cup, the student will measure 1/3 cup of sand by dipping.

Technique

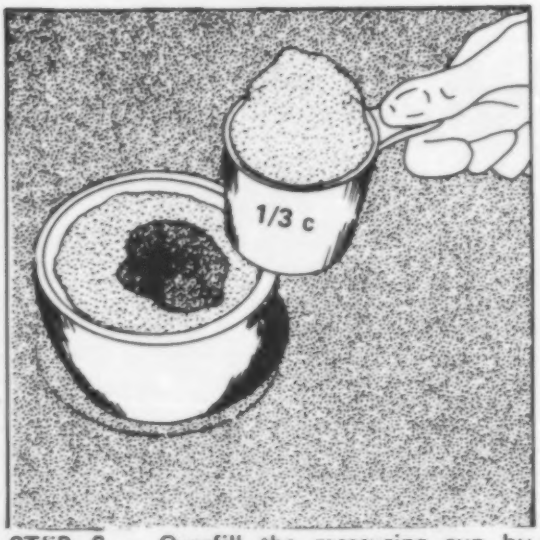
STEP 1 – The technique for measuring correctly using a Mary Ann cup set is very much like the one you used with the measuring spoons.



STEP 2 – To use Mary Ann cups, you need to use a spatula.

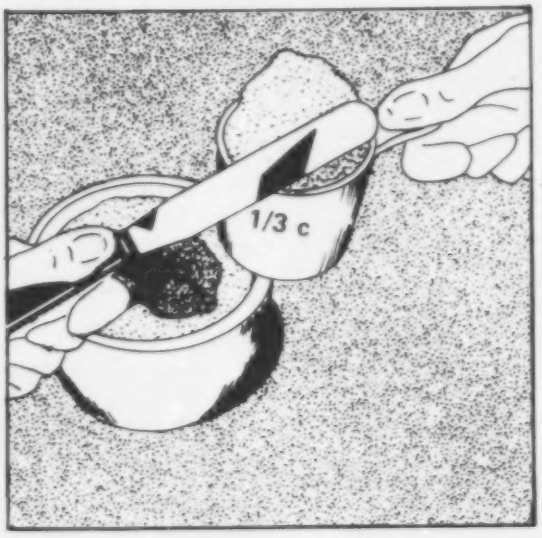
STEP 3 – Caution: Don't tap the measure against any hard surface. Tapping causes ingredients to pack and causes inaccurate measurement.

STEP 4 – Don't pack or mash the ingredients. Measures are to be filled lightly (one exception – brown sugar should be very lightly packed.)



STEP 6 – Overfill the measuring cup by dipping it into the sand.

STEP 5 – Pick the 1/3 measuring cup.



STEP 7 – Use the blade edge of the spatula to level the sand. Hold cup over container to avoid waste.

Check Point

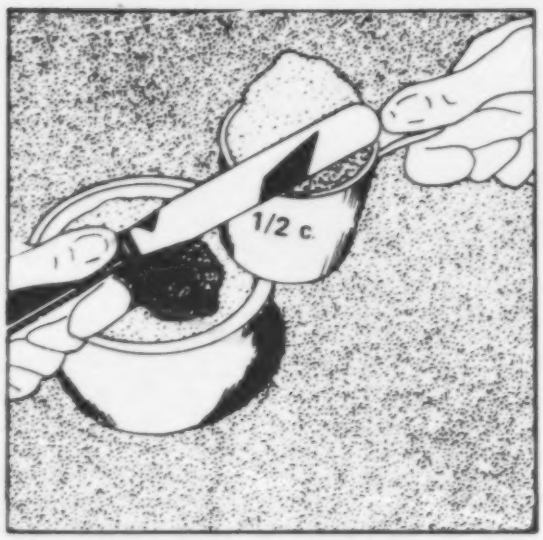
Did you pick the right cup?
Did you overfill the cup by dipping?
Did you use a spatula to level the sand?

Instructional Objective V

Using a Mary Ann cup, the student will measure ½ cup of sand by spooning.

STEP 1 – Pick the ½ measuring cup.

STEP 2 – Use a spoon to gently fill the measure until slightly overfull. This is the method to use with foods which pack such as flour.



STEP 3 – Use the blade edge of the spatula to level the sand. Hold cup over container to avoid waste.

Check Point

Did you pick the right cup?
Did you overfill the cup by spooning?
Did you use a spatula to level the sand?

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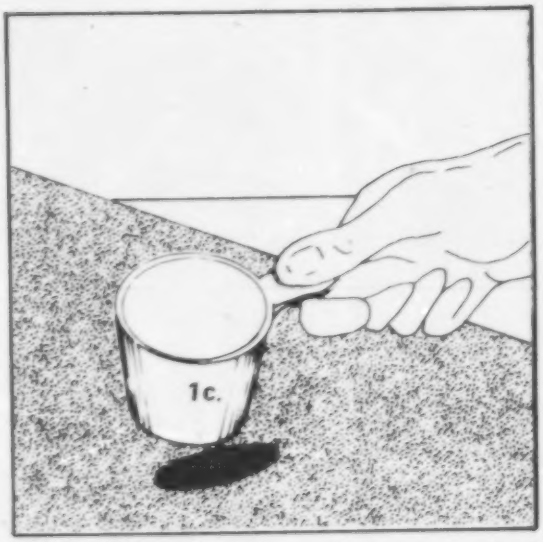
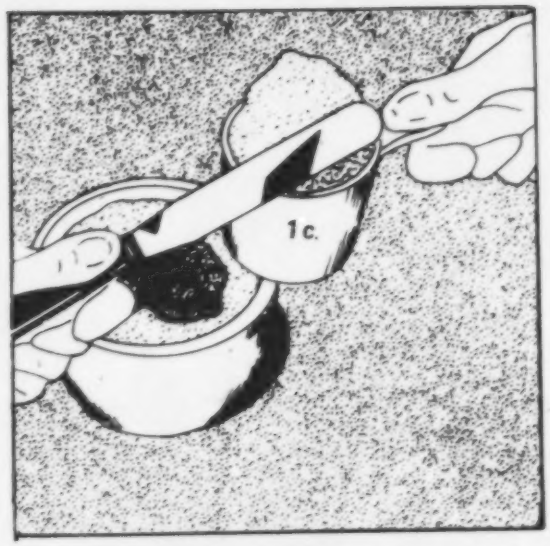
Instructional Objective VI

Using a Mary Ann cup, the student will measure 1 cup of sand by pouring.



STEP 1 – Pick the measuring cup that is 1 cup.

STEP 2 – Pour sand from container into measuring cup until slightly overfilled. Be careful, it's easier to spill using this method.



STEP 3 – Use the blade edge of the spatula to level the sand. Hold cup over container to avoid waste.

Check Point

Did you pick the right cup?
Did you overfill the cup by pouring?
Did you use a spatula to level the sand?

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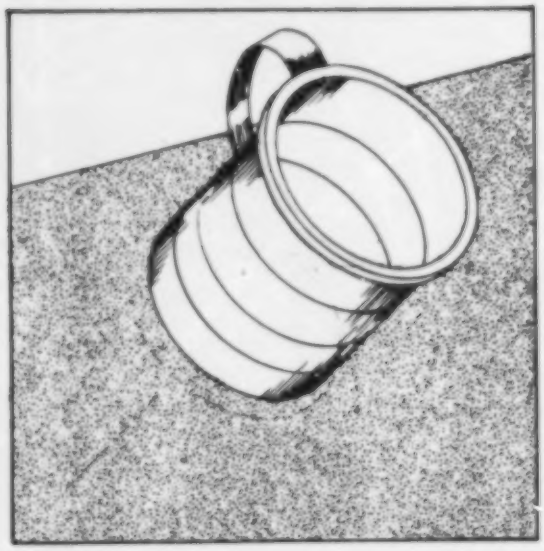
Instructional Objective VII

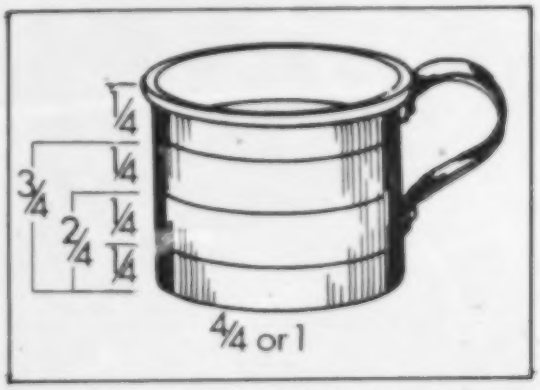
The student will recognize the method for measuring when using dry measures.

STEP 1 – The technique you use to measure 1 cup, 1 pint, 1 quart, and 1 gallon dry measure is exactly the same as when using Mary Ann measuring cups.

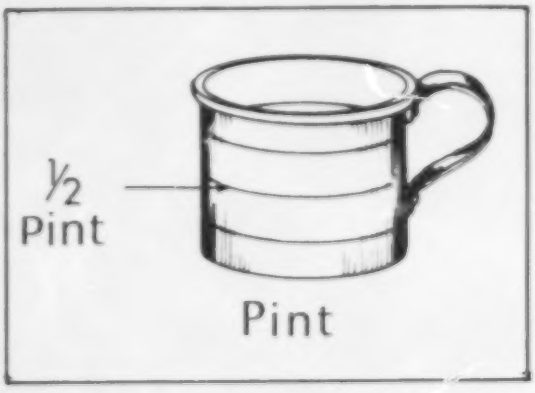
STEP 2 – When the dry measure is less than their total volume, you must make a good guess using the ridges as guides.



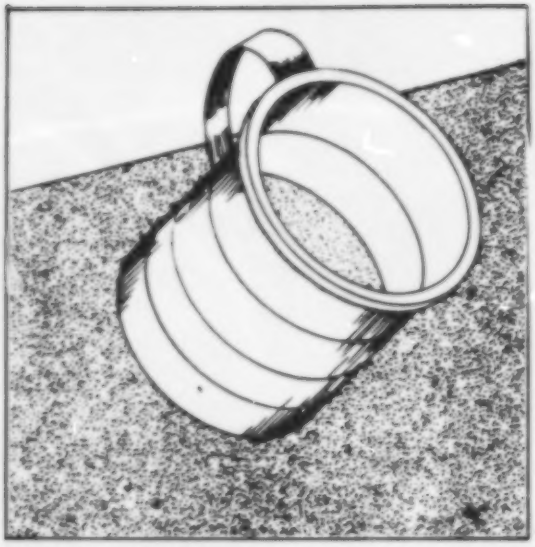
STEP 3 – Look inside the measures. Note that you can see the ridges on the inside also.



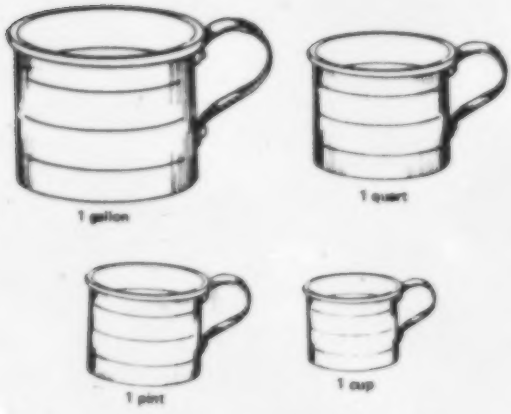
STEP 4 – Remember each ridge indicates one/quarter of the total volume.



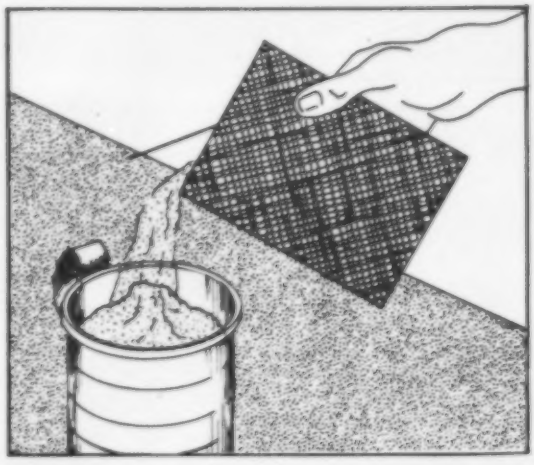
STEP 5 – To measure one half pint, you would fill the measure to the second ridge.



STEP 6 – Notice the ingredients come to the second ridge.



STEP 8 – Select the correct dry measure.



STEP 9 – Fill by dipping or pouring to the correct ridge. Be careful to fill gently.

STEP 7 – When filling a dry measure less than full, you cannot level by pulling the spatula blade over the top of the measure.

STEP 10 – Be very careful not to pack ingredients. Partial measures are not as accurate as full measures, so try very hard for as much accuracy as possible.

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Check Point

When measuring 1 cup, 1 pint, 1 quart, or 1 gallon, what type of measure should you use?

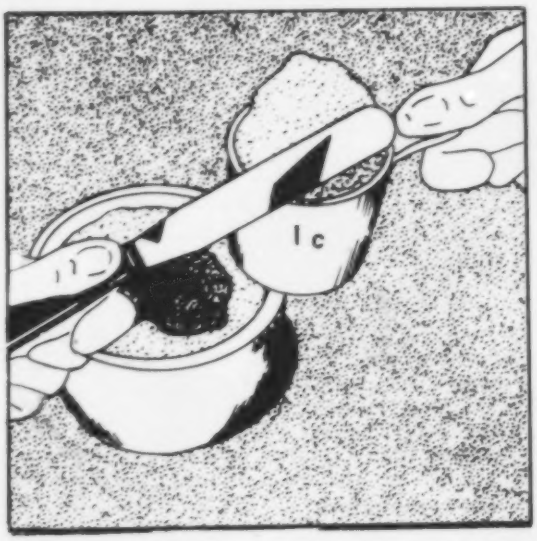
When measuring less than the total volume of the dry measure, what do you use as a guide?

Can a spatula be used to level an ingredient when the dry measure is less than full?

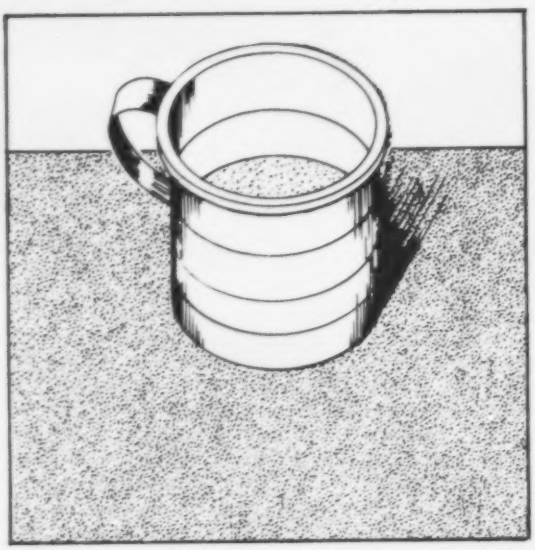
What two methods should be used to fill a dry measure?

Instructional Objective VIII

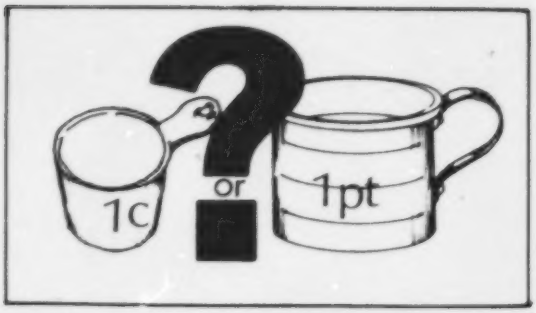
The student will compare the measurement relationships between a cup, a pint, a quart, and a gallon.



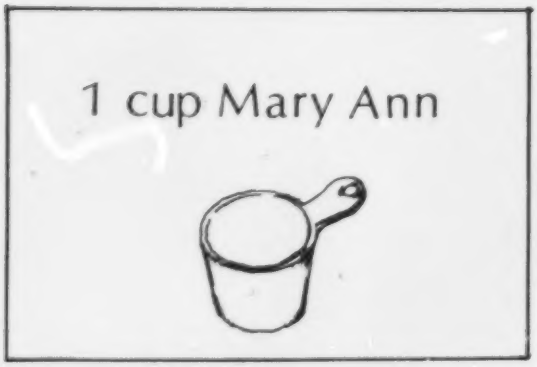
STEP 1 – Measure 1 cup sand using Mary Ann measuring cup.



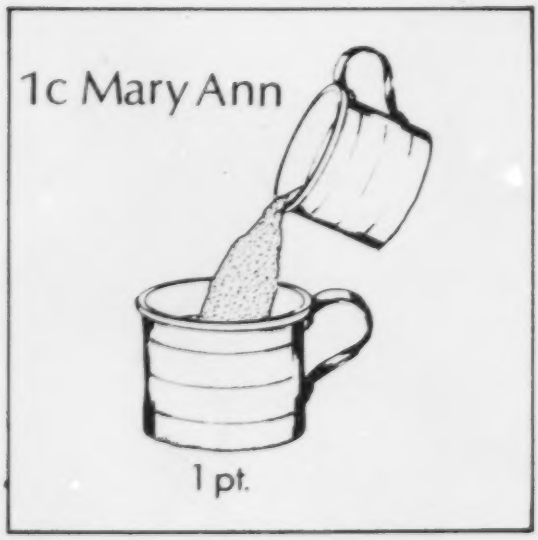
STEP 2 – Measure 1 cup sand using the 1 pint dry measure.



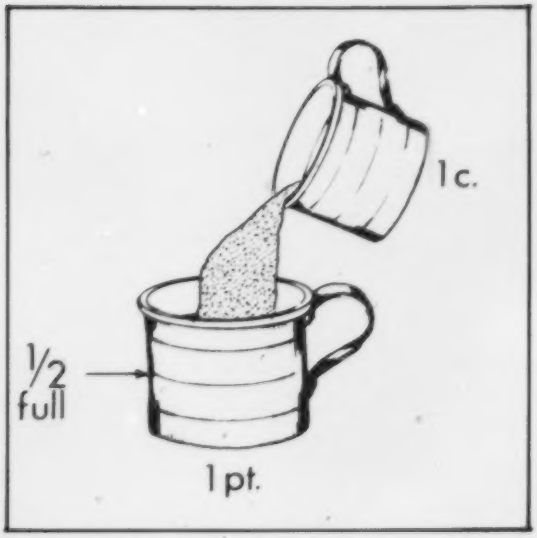
STEP 3 – Which one did you think was easier and also more accurate?



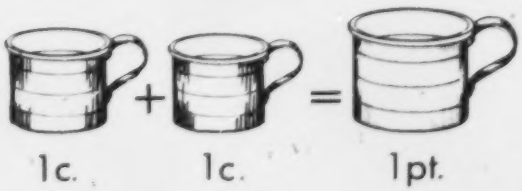
STEP 4 – The 1 cup Mary Ann measuring cup is the easier and more accurate of the two.



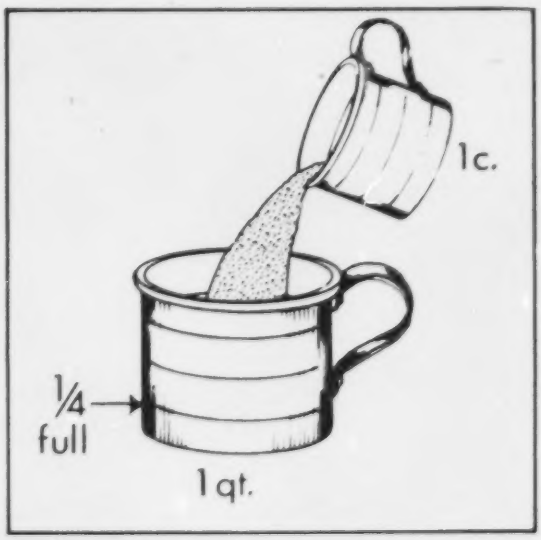
STEP 5 – Using the 1 cup Mary Ann measure, pour one cup of sand into the one pint dry measure. How full did one cup fill the pint measure?



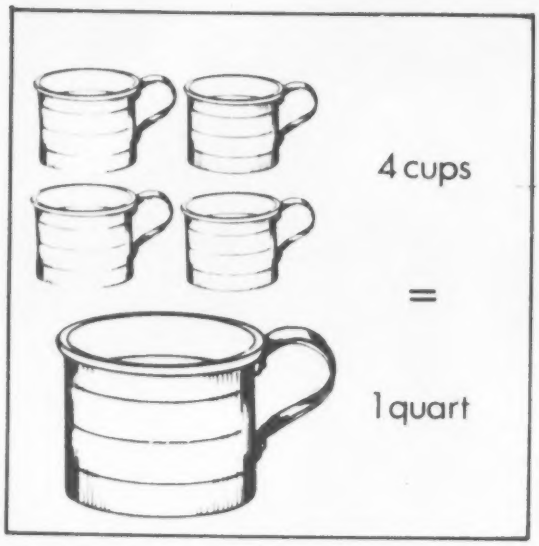
STEP 6 – One cup equals ½ pint. How many cups equals one pint?



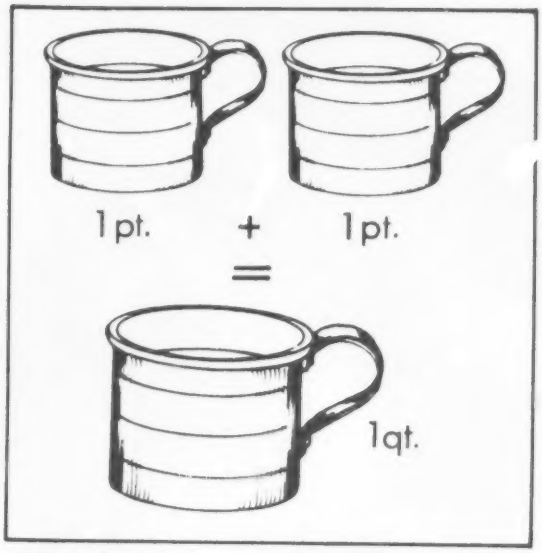
STEP 7 – 2 cups equal 1 pint. Empty sand back into container.



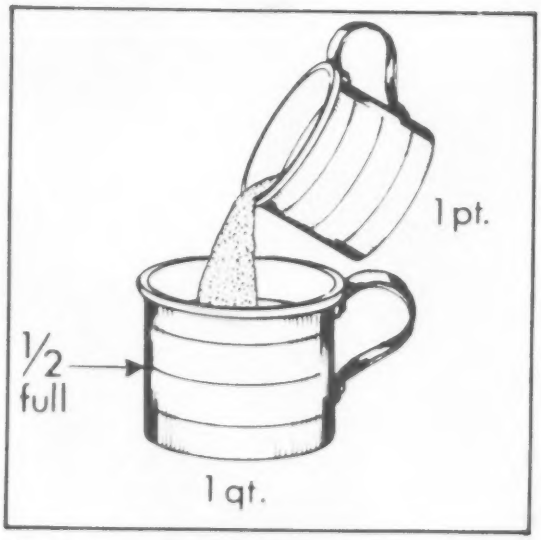
STEP 8 – One cup equals ¼ quart. How many cups equal one quart?



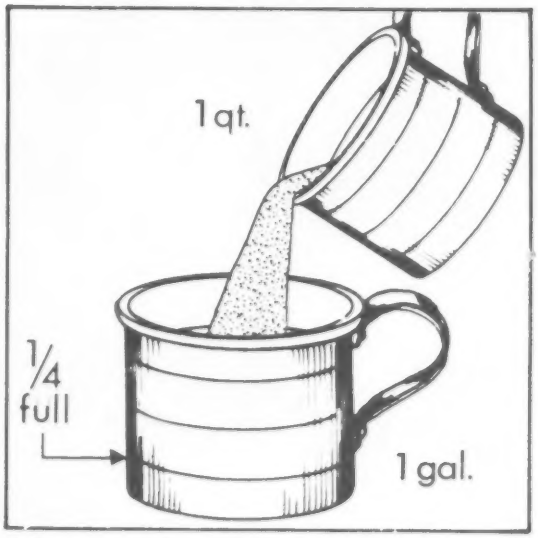
STEP 9 – 4 cups equal 1 quart.



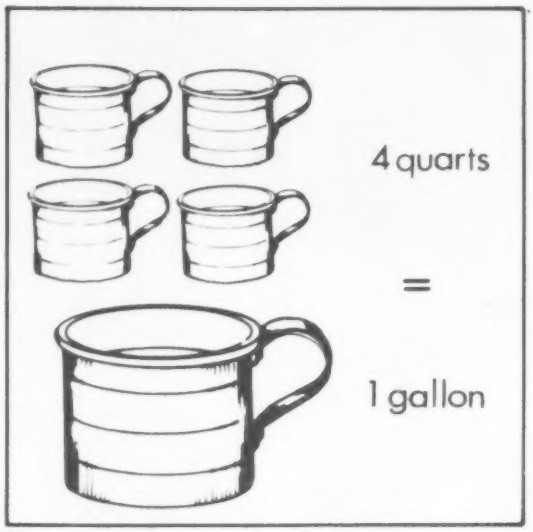
STEP 11 – 2 pints equal 1 quart.



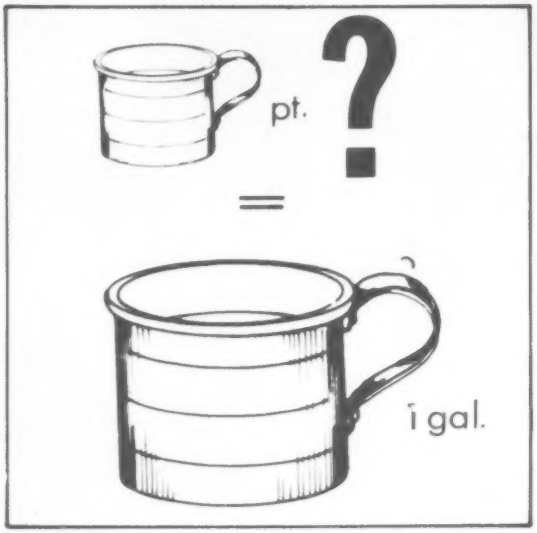
STEP 10 – One pint equals ½ quart. How many pints in a quart?



STEP 12 – One quart equals ¼ gallon. How many quarts equals one gallon?



STEP 13 – 4 quarts equal 1 gallon.



STEP 14 – How many pints are in one gallon?

4 quarts	= 1 gallon
2 pints	= 1 quart
8 pints	= 1 gallon

STEP 15 – 8 pints = 1 gallon

STEP 16 – How many cups are in one gallon?

8 pints	= 1 gallon
2 cups	= 1 pint
16 cups	= 1 gallon

STEP 17 – 16 cups = 1 gallon.

Check Point

Get the handout for the Checkpoint for Instructional Objective VIII, Measuring Solids, from your instructor.

Without looking in the programmed text, complete all the blanks on the handout by writing the amount of the level the arrow is pointing to on the dry measure.

After you have filled in all the blanks, go back to your instructor and ask to see the master to correct your answers.

If your answers are wrong, redo the steps and the Checkpoint.

521.685-214 MEAT GRINDER (slaught. & meat pack.)

Tends machine that grinds meat for use in making such products as bologna, meat loaves, and sausages: Pushes truck of cut meat from cooler room to grinding machine. Selects and inserts grinding plate in machine for specified particle size. Shovels meat into machine hopper, using fork, and positions truck under discharge spout. Starts machine. May cut chunks of meat into smaller pieces, using power operated cleaver or slicer. May select and weigh meat in cooler room for grinding.

316.681-010 BUTCHER, MEAT (hotel & rest.) butcher; meat cutter

Cuts, trims, bones, ties, and grinds meats, using butcher's cutlery and powered equipment, such as electric grinder and bandsaw, to portion and prepare meat in cooking form: Cuts, trims, and bones carcass sections or prime cuts, using knives, meat saw, cleaver, and bandsaw, to reduce to cooking cuts, such as roasts, steaks, chops, stew cubes, and grinding meat. Cuts and weighs steaks and chops for individual servings. Tends electric grinder to grind meat. Shapes and ties roasts. May estimate requirements and requisition or order meat supply. May receive, inspect, and store meat upon delivery. May record quantity of meat received and issued to cooks. May clean fowl and fish [BUTCHER, CHICKEN AND FISH (hotel & rest.)]. May oversee other butchers and be designated BUTCHER, HEAD (hotel & rest.).

315.361-010 COOK (any ind.) cook, mess

Prepares and cooks family-style meals for crews or residents and employees of institutions: Cooks foodstuffs in quantities according to menu and number of persons to be served. Washes dishes. Bakes breads and pastry [BAKER (hotel & rest.)]. Cuts meat [BUTCHER, MEAT (hotel & rest.)]. Plans menu taking advantage of foods in season and local availability. May serve meals. May order supplies and keep records and accounts. May direct activities of one or more workers who assist in preparing and serving meals. May be designated according to work location as COOK, CAMP (any ind.); COOK, INSTITUTION (any ind.); COOK, RANCH (agric.); COOK, SHIP (water trans.).

313.1[illegible]HEF (hotel & rest.) cook, chief; k[illegible]

Supe[illegible]ordinates, and participates in activities [illegible]ks and other kitchen personnel engaged in preparing and cooking foods in hotel restaurant, cafeteria, or other establishment: Estimates food consumption, and requisitions or purchases foodstuffs. Receives and checks foodstuffs and supplies for quality and quantity. Selects and develops recipes. Supervises personnel engaged in preparing, cooking, and serving meats, sauces, vegetables, soups, and other foods. Cooks or otherwise prepares food according to recipe [COOK (hotel & rest.)]. Cuts, trims, and bones meats and poultry for cooking. Portions cooked foods, or gives instructions as to size of portions and methods of garnishing. Carves meat. May employ, train, and discharge workers. May maintain time and payroll records. May plan menus. Usually found in small establishments not employing a number of skilled specialists. See EXECUTIVE CHEF (hotel & rest.) when worker's duties a.e. typically limited to supervising kitchen staff, planning menus, and purchasing foodstuffs. May be designated according to cuisine specialty as CHEF, FRENCH (hotel & rest.); CHEF, GERMAN (hotel & rest.); CHEF, ITALIAN (hotel & rest.); or according to food specialty as CHEF, BROILER OR FRY (hotel & rest.); CHEF, SAUCIER (hotel & rest.). May supervise workers preparing food for banquets and be designated BANQUET CHEF (hotel & rest.).

526.381-010 BAKER (bake. prod.)

Mixes and bakes ingredients according to recipes to produce breads, pastries, and other baked goods: Measures flour, sugar, shortening, and other ingredients to prepare batters, doughs, fillings, and icings, using scale and graduated containers. Dumps ingredients into mixing-machine bowl or steam kettle to mix or cook ingredients according to specifications. Rolls, cuts, and shapes dough to form sweet rolls, piecrust, tarts, cookies, and related products preparatory to baking. Places dough in pans, molds, or on sheets and bakes in oven or on grill. Observes color of products being baked and turns thermostat or other controls to adjust oven temperature. Applies glaze, icing, or other topping to baked goods, using spatula or brush. May specialize in baking one type of product, such as breads, rolls, pies, or cakes. May decorate cakes [CAKE DECORATOR (bake. prod.)]. May develop new recipes for cakes and icings.